



Pharm

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

Entered as second-class matter Dec. 7, 1914 at New York Postoffice

D. O. HAYNES & Co. Publishers No. 3 PARK PLACE NEW YORK U.S.A.

SUBSCRIPTION:—U. S., CUBA AND MEXICO, \$4.00; CANADA, \$4.50; FOREIGN, \$5.00 A YEAR IN ADVANCE

VOL. VI

NEW YORK, JANUARY 21, 1920

No. 3

Oil Apricot Kernels

Pressed at National City, Calif.

W. J. BUSH & CO., Incorporated

100 William Street

New York

BATTELLE & RENWICK

Refined

NITRATE OF SODA

Gran. — Pwd. — Cryst.

80 Maiden Lane, New York

John 103

Founded 1840

All Codes

Garrigues Industrial Products Corp.

54 Wall Street, New York City

NITRITE OF SODA 96/98%

NORWEGIAN

NITRATE OF AMMONIA 99.8%

NORWEGIAN

MERCK & CO. Chemicals

St. Louis

NEW YORK

Montreal

Works at Rahway, N. J.

Cable Address:
"Graylime, N. Y."

Established 1880

Telephone Call:
John 4500-1-2-3

WM. S. GRAY & CO.

80 Maiden Lane, New York

Manufacturers' Agents

MAGNESIA CARBONATE CALCINED

Warehouses: 44 Cliff St., N. Y.
Newark, N. J.

Enquiries Solicited

Agencies and Consignments
Drugs, Chemicals, Oils, Dyes
Financed and Marketed

F. E. CHILDS CO., INC.

79 Front Street, New York

Cables: Fochilio, Newyork.

All Codes Used

We offer for Prompt or Future Shipment:—

Acetanilid
 Acetyl Salicylic Acid (Aspirin)
 Acetphenetidin (Phenacetin)
 Phenolphthalein
 Salicylic Acid
 Soda Salicylate
 Salol

Saccharin
 Glycerophosphates
 (Calcium, Sodium, Potassium, etc.)
 Caffeine
 Chloral Hydrate
 Vanillin
 Coumarin

We solicit your inquiries

Monsanto Chemical Works

ST. LOUIS, Mo.
NEW YORK, MONSANTO BUILDING, 12 PLATT STREET

PRECIPITATED CHALK

{ EDWARD P. MEEKER, Agent
68 Maiden Lane, New York City
Phone John 6346

Write for prices and samples

Pfaudler Utility Pot

Specifications

Capacity—26 gallons.

Size—Diameter inner pot 18 inches, Depth inner pot 25 inches. Total height 45 inches with legs. Floor space 4 square feet.

Material—Open hearth sheet steel three sixteenths of an inch thick.

Lining—All interior surfaces in contact with contents lined with PFAUDLER Acid-Resistant, Glass Enamel.

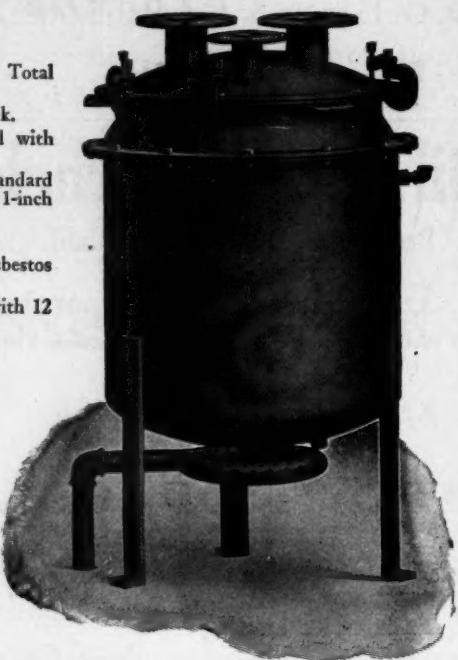
Connections—One 2-inch standard flanged nozzle. Two 3-inch standard flanged nozzles. Jacket connections—1-inch oil inlet and 1-inch drain.

Handles—3 handles welded to inner pot to facilitate its removal.

Top Head—Secured to pot by 12 C-clamps. Joint made with asbestos gasket.

Jacket—Sealed with asbestos gasket and secured to inner pot with 12 bolts.

Legs—Three eights inch steel 2½ inches wide of suitable length.



What the Chief Chemist said

"It has proven invaluable in our work both because it has given splendid satisfaction with acid solutions (Sulphuric, Nitric and Acetic in various concentrations, both hot and cold) and because we have found it so handy and convenient for so many different operations. I do not see how any manufacturing chemist or pharmacist is content to get along without this compact, efficient, versatile, economical outfit."

This is what Dr. Schultz, chief chemist of the Rochester Photo-Chemical Works, says about the PFAUDLER, Acid Enamelled, Utility Pot shown in the picture after over a year's experience with it.

He also told us (for publication to American Chemists) how he was able to use this outfit for Distilling, Evaporating, Crystallizing, Dissolving and Mixing and for carrying out various

reactions requiring an absolutely acid-resistant container.

The Rochester Photo-Chemical Works is a real synthetic chemical plant where they build up exceedingly complex organic compounds from raw material, carrying out in the process many major chemical operations such as electrolytic synthetic condensation. Their experience should be of deep interest to everyone interested in manufacturing chemistry.

We have published the Doctor's observations in the form of an attractive little folder entitled "What the Chief Chemist Said." May we send you a copy?

Tear off the coupon, paste it on a post-card and mail it now. Add our story to your fund of information.

THE PFAUDLER CO.
Rochester, N.Y.

New York Detroit Chicago St. Louis San Francisco

THE PFAUDLER CO.
Advertising Dept.
Rochester, N.Y.

Without obligation on our part you may
send me a copy of your folder "What the
Chief Chemist Said."

Name _____

Address _____

Gen. Nature of Bus. _____

*We solicit your inquiries
for the following:*

Essential Oils

Oil Camphor (Bi-product)
Oil Cloves, Zanzibar, U.S.P.
Oil Pimento Berries
Oil Thyme, White, U.S.P.
Oil Wintergreen (Methyl Salicylate)

Special Pharmaceutical Chemicals

Barbital (Diethyl Barbituric Acid)
Barbital Sodium
Eucalyptol

Synthetic Perfume Chemicals

Benzaldehyde, U.S.P.
Benzyl Alcohol
Geraniol, Standard, A.C.
Heliotropine
Terpineol

“Chiris” Distilled Floral Waters (Concentrated)

Orange Flower, U.S.P.
Cherry Laurel
Elder Flower

“Chiris” French Olive Oil

Packed in 5-gallon tins, 1-gallon tins, 1/2-gallon tins.

Orris Root

Bold, Powdered, Granulated.

ANTOINE CHIRIS COMPANY

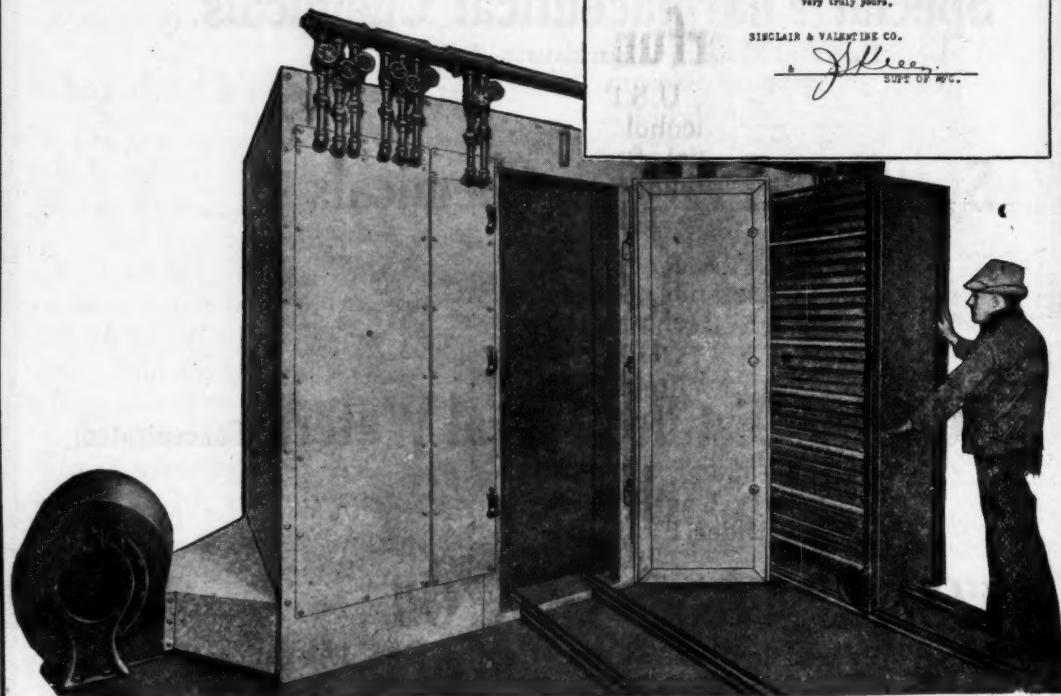
18 - 20 Platt Street

New York

Works, Delawanna, N. J.

A letter about saving Time, Money and Labor

Read it!



The illustration shows a Gordon SC2 Compartment Dryer with loaded trucks in the plant of the Sinclair and Valentine Company, manufacturers of chemicals, colors, varnishes, inks and dyes.

The drying of fine colors is one of the most delicate of operations, but the Gordon Dryer is specially suited for just this kind of specialized work.

That Sinclair and Valentine Company is more than pleased with the results is simply indicated by the above letter. Perhaps YOU have a drying operation that has been giving you trouble?

If so, we will gladly dry a large test sample of your product for you, and at the same time send you a full

report as to the time, cost, etc., of drying it by the Gordon process. This service is absolutely free. It is undertaken solely to demonstrate the fact that there is no product that cannot be dried quicker, better and cheaper by the Gordon process than by any other.

GORDON DRYER CORPORATION

ROOM 620

39 Cortlandt Street

New York

Gordon Dryers

Sinclair and Valentine Co.

MAKERS OF
PULP AND DRY COLORS
INKS VARNISHES AND DRYERS
FOR ALL PRINTING PURPOSES.

Gordon Dryer Corporation, September 18, 1919.
39 Cortlandt Street,
New York, N. Y.

Dear Sirs:

We recently installed one of your dryers in our color plant, and have found same to be very satisfactory. We find that we can dry an ordinary base color in seven or eight hours, whereas it formerly took two to three days. This color can be subjected to very high heat in this dryer, and still retain its softness and original shade. In this respect it has given especial satisfaction.

Very truly yours,

SINCLAIR & VALENTINE CO.

J. Kleen.
Supt. of Mfg.

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

VOL. VI

NEW YORK, JANUARY 21, 1920

No. 3

Entered as second-class matter, Dec. 7, 1914, at the post office at New York, N. Y., under the Act of March 3, 1879.

DRUG & CHEMICAL MARKETS

PUBLISHED EVERY WEDNESDAY

D. O. HAYNES & CO., Publishers, . New York
Publication Office: No. 3 Park Place.

Phone, 7646 Barclay, Cable Address, Chemmarket, New York

SUBSCRIPTION RATES

United States, Cuba and Mexico.....\$4.00 a year
Canada \$4.50 and Foreign \$5.00 a year

Single Copies, 10 cents

ALL SUBSCRIPTIONS PAYABLE IN ADVANCE

REMIT by P. O. or Express Order or New York Draft payable to order of D. O. Haynes & Co. Add 10 cents for collection charges if you send local check.

Published at No. 3 Park Place, Borough of Manhattan, New York, by D. O. Haynes & Co., a corporation; President and treasurer, D. O. Haynes; vice-president, E. J. Kennedy; secretary, N. W. Haynes. Address of Officers is No. 3 Park Place, New York.



A BINDER
FOR THIS JOURNAL
Save Your Copies
Price \$1.00 net Cash, postpaid

Table of Contents

EDITORIALS—

- Dangerous Delays 101
Increased Production 101
The Flurry in Silver 102
Substitute for Dye Licensing System 102

FEATURE TRADE ARTICLE—

- Growing Demand for American Dyes Discussed by Trade Factors 103

TRADE NEWS—

- Camphor Allotment by Japan to U. S. for Next Three Months 104
Senate Finance Committee Considering Bills to Protect U. S. Dye Industry 105
United States' Output of Sodium Compounds 107
German Aromatic Chemical Mfrs. Warned .. 115
British Chemical Industry in 1919 123

MARKET REPORTS—

- Drugs and Chemicals 112-113
Essential Oils 114-115
Heavy Chemicals 116-117
Colors and Dyestuffs 118-119
The Oil Markets 120-121
Foreign Markets 122-123
- PRICES CURRENT 124-136
IMPORTS 138

DANGEROUS DELAYS

That Congress is going to give adequate protection to the American dye industry is now well assured. The exact details of the licensing or embargo plan which is to be worked out by the Senate Sub-Committee cannot be foretold; but the fact that the Senate has been convinced by the long series of hearings that such protection must be given and that it will be for the benefit of the entire nation is made plain by the attitude of leaders of both political parties. No better evidence of the vital importance of a coal tar chemical industry could be brought forward than the joining of Republican and Democrat in drafting a tariff bill. Now, even the skeptical, the cynical, and the selfish ones—and they have all appeared against the Longworth Bill at the Senate hearings—admit that the dye industry will be protected because an independent, self-contained chemical industry is essential to our industrial development in times of peace and in event of war vital to our national security.

This being so, it is to be sincerely hoped that Congress will act very promptly in this matter of the dye tariff. Admittedly there is much to be done to put this new industry on its feet and in a position to serve the consuming industries as they need to be served, and it is no secret that this development work has all been held up indefinitely during the discussion of the Longworth Bill. It will not be resumed until the tariff becomes the law of the land. Our dye makers have been awaiting the decision of Congress. They have bought supplies from hand to mouth. They have stopped a great deal of important research work. They have made no effort to enlarge their plants to meet the constantly greater and more insistent demands of consumers. They have abandoned serious experimental work upon the development of new products, many of them dyes sorely needed, which they could soon perfect and place upon the market. Since the destruction of the dye industry by foreign competition is perfectly feasible, unless there is adequate protection, it is very natural that the dye manufacturers should suspend all their development work pending a decision upon the tariff, nor will they risk a certain financial loss against an uncertain congressional hope. The industry will stand still until there is a sound and sure incentive for its further progress.

INCREASED PRODUCTION

In the present stages of readjustment, the all important question of production, meaning increased production, should be given sound and serious thought. From several stand-points this question is just as important today as it was during

the war. Leaders of finance in all parts of the country believe that we will see ultimately a revision of prices and that a more or less natural decline will occur. The readjustment of present salaries or wages is where the "dovetailing" must be complete and true.

It is possible today to find on the market quite a few products which are selling at the same price at which they sold at retail previous to the war. This is possible in cases where producers have increased their output and their selling area to such an extent that they have been able to meet higher wages. Their earnings in many instances have shown an increase. These cases are certainly in the minority, but clearly indicate that the situation can be met in this manner.

W. T. Kemper, of the National Bank of Commerce of Kansas City, is quoted as saying: "Based upon the experience of the last thirty years the average commodity price will continue downward until the Spring of 1921. Disturbing factors will no doubt affect the trend, but only temporarily and we may probably look for the lowest point about March, 1921."

F. M. Prince, of the First & Security Bank of Minneapolis, says: "We feel that there must soon be an adjustment to a lower level of all lines of business and living costs, including returns on capital and wages of labor, with greater production for each hour of labor."

These extracts are similar in tone to remarks by officers of financial institutions throughout the country. It will be noted that the general belief is in a slow but sure decline in prices and now is the time to prepare. With proper preparations, manufacturers and dealers should not feel any inconvenience or suffer losses.

SUBSTITUTE FOR DYE LICENSING SYSTEM

The American Dyes Institute has met the objections of importers of colors, and textile manufacturers who opposed the licensing system incorporated in the Longworth bill, by a plan permitting imports of dyes not made in this country upon the statement of the consumer that he needs the products in his business. The importer can bring in supplies in bond without limit. When he has a bona-fide order for material he can present it to the proper official and get the goods, according to this plan.

Control is placed with the U. S. Tariff Commission. No more formalities are involved than under the present system. Old products under new names, and substitutes, cannot be imported until thoroughly investigated by the Tariff Commission. If a consumer finds that a color which he needs is not on the importable list, the Commission must consider an appeal by a manufacturer or dealer, and the product must be added to the list. A check is placed on excessive competition by giving the Commission the right to refuse further requests for importations whenever it is apparent that the supply of any product is sufficient to provide for the needs of the whole country for six months.

THE FLURRY IN SILVER

The unprecedented advance in the price of silver in London is believed to be too great a rise to have resulted from a legitimate demand for the metal. It was also a very sudden advance, and was probably due to the efforts of speculators to meet commitments which are nearly due. When they get the required amount the price will drop and will become normal by February, it is believed in financial circles.

The people of India and China hoard silver in great quantities, and there is strong probability that Persia, Mesopotamia, Syria, Anatolia, and Armenia are beginning to hold silver coins which reach those countries and will absorb all they can get for some time. While these facts explain where much of the silver of the world goes when it disappears from circulation, there is another element in the present extraordinary demand, not explained by the hoarding habit.

The present price may stimulate the production of silver in mines where it is found in conjunction with lead or copper, but it is doubtful whether it will cause the reopening of silver mines because the cost of labor has greatly increased. If the high price of silver is only temporary, mining interests will be slow in investing in new "prospects" or installing machinery in old properties. There are some products in which silver is used that may advance materially, but they are not likely to remain high, fluctuating from week to week with the price of the metal.

THE BUSINESS OUTLOOK

The maintenance of remarkably heavy payments through the banks is reflected in the continuance of the largest clearings ever recorded for this period, the total this week at twenty leading cities in the United States, \$8,567,898,154 according to "Dun's Review," showing gains of 28.6 and 54.5 per cent, respectively, as compared with the figures of this week in 1919 and 1918. The expansion is general throughout the country.

With contracts already booked that mean full employment of machinery for months ahead, many manufacturers are not unnaturally indifferent about engaging themselves further, and reports of profitable commitments being turned aside are again rather common. Such phases as these had become familiar in war times, and are the more noteworthy now that the special requirements of that period are no longer a factor in stimulating activity. Yet economic aspects plainly reflect contrasts of light and shade, and the proposal for a world-wide conference of business interests to consider the various existing problems and to suggest constructive action has demonstrated that the dark spots in the outlook are not being disregarded.

Resumption of activity in business has come quickly in various quarters where a year-end pause had been witnessed, and existing conditions differ sharply from those of the early part of 1919, when hesitation was nearly everywhere manifest. Whereas many buyers were then waiting for lower prices, or were deferring important operations because of doubts regarding the effects of the after-war readjustment, competition for goods is at present so keen as to force certain markets up to levels beyond any previously known; and some sellers who a year ago were complaining of lack of orders cannot now fully satisfy the demands being made upon them.

Growing Demand for American Dyes

Export Trade Increasing and Domestic Consumers Stripping the Market of Colors

VESTUFF prices and demand during the past year have shown in a very marked degree the effect of the world-wide suspense over the results of the peace settlement. The early part of the year was characterized by an increasingly slow market in all dyestuff lines, caused largely by the expectation among buyers, both American and foreign, of a great stock of materials of this type to be released from Germany as soon as possible. As time brought no dyes, buyers grew restive, and the opinion became prevalent among manufacturers that perhaps there was no such tremendous stock soon to be dumped upon them. During September, buying began and has been increasing steadily since that time. The market that had been glutted with all types of dye materials was soon stripped bare, and prices began to rise rapidly. In view of the continued demand and shortness of stocks, it is prophesied in many quarters that the immediate future will lead to new high levels.

Necessity for Protection

A decided feeling of optimism as to the immediate future seems prevalent among manufacturers. Mr. Dorland, of the Dow Chemical Company, expresses great confidence in the markets and the industry at large, provided Congress passes suitable protective legislation. The absolute need for protection will not be felt for some months, but, sooner or later, there will have to be some effective barrier to keep out commercial invaders.

The dyestuff industry must feel the continued moral support of the country at large, and not only moral but financial, suggests Mr. Mace, of Aniline Dyes & Chemicals, Inc.

Mr. Mace views the situation as largely one of expansion or no expansion. The dyestuff industry has shown marked development along two particular lines during the past year, the developments of new products and the standardization of products already on the market. The time has passed when textile manufacturers are willing to accept "anything with a color," and they are now demanding the best and that that be a uniform best. This has cost money, and the manufacturers have been content, and must remain content for some time to come, to return the greater part of their profits to their businesses for improvement purposes. This state of affairs cannot continue indefinitely. Investors are becoming dissatisfied with mere paper profits which they will not be able to realize upon until some indefinite future time. New money must be obtained, and the money already invested must be made to yield a dividend and not simply an expanded business which, in a short time, will have to be abandoned. The attitude of some manufacturers just at present seems to be a rather short-sighted one. Their optimism does not permit them to see into the future around a forty per cent reduction of the German coal fields, and the thirty dollars per ton for which the coal is being sold. While the question of protection is not necessary to the immediate present of the industry, it is absolutely vital to development of that future we must have.

Production Costs and Competition

Dr. Matthews, of the Grasselli Chemical Company,

explains the necessity for licensing in one instance when he calls attention to the cost of producing betanaphthol in Germany as 10 cents per pound before the war, while our actual production cost has not yet been reduced below 25 cents. The German price of 10 cents can be duplicated now in Switzerland. However, our present production cost of sulphur black is well below that of Germany before the war. This is taken to indicate that a licensing system which would encourage development for even a limited time might give our manufacturers the opportunity they need.

The question of protection is particularly vital to the smaller manufacturers, according to Mr. Kendall, of the Chemical Company of America. It is the small manufacturer who must continuously realize on his investment and who would be especially crippled by such cut-throat methods as the Germans are planning to use. The necessity for these "moppers up" of the industry to take care of what might be called specialties is beyond question, and it is they who will be the first and greatest sufferers after the present high tide of buying has ebbed. For the present, higher prices and strong demands will undoubtedly feature the market.

Export Demand Increasing

Mr. Robertson, of Heller and Merz, sees ahead a long period of scarcity of all dye materials in consequence of the tremendous export demands. Spain and Japan are both active in the market, which, especially in the case of Spain, is taken to indicate disappointment of their hopes of German supplies. This condition must become stable before any settled state may be expected.

Mr. Stitt, of J. H. Stitt & Co., has great confidence in the passage of proper legislation to keep the dyestuff industry intact, but he believes that it is not so much a question of protection as co-operation between manufacturers and jobbers which will determine the outcome of the world trade war. The attitude of every man for himself can not lead to a conquest of the world's markets. The present condition of immense export demand is only temporary, and as soon as this has passed we will face a decision fight with foreign manufacturers for South American trade especially.

The attitude of the British Government toward imports to British possessions is having its effect in inducing many manufacturers to establish factory branches in Canada or elsewhere under the British flag.

Japanese representatives have been unable to obtain supplies of finished fabrics, especially cotton goods, from either Britain or this country within two to four years and are consequently buying entire mills for export to Japan. With Japan entering the textile industry, a very lucrative business in the necessary dyes or intermediates is probable.

Strong market conditions and rising prices are everywhere expected in the dyestuff field. Great and growing export demands for the first months of the year are anticipated, and after that no one is willing to hazard a guess at conditions until Congress has definitely settled the question of protection.

**CAMPHOR ALLOTMENT BY JAPAN
TO U. S. 379,635 LBS. FOR 3 MONTHS**

Price Is Fixed at 557 Shillings Per Hundredweight—
Effect of Heavy Demand in Hongkong for Camphor
From South China—Prices in China Compared With
Those in Japan and United States

Consul Hitchcock cables from Taihoku, Taiwan, that the amount of camphor allotted to the United States for the first three months of the year 1920 is 379,635 pounds, costing 557 shillings per hundredweight.

From Hongkong, Consul General Anderson sends advice to the effect that the shortage in the supplies of camphor, due to the much reduced output of Formosa (Taiwan) and the greatly increased demand during 1919 has resulted in prices which have been moving all the camphor to be obtained in South China, and there has been a boom in the trade in Hongkong. Exports of camphor from Hongkong to the United States in the earlier months of 1919 were too small to be separately noted in the trade returns. The total exports from the colony for the first quarter of the year amounted to only \$54,810, at normal sterling exchange; the value in the second quarter rose to \$233,954. In the first quarter nearly the whole of the exports went to India, the Straits Settlements taking about 10 per cent of the total. In the second quarter India continued to take some of the output, but the United States commenced to draw upon the South China stocks, taking exports to the value of \$181,550. Since then the export of the gum to the United States has steadily increased, the value of such exports for July reaching \$176,900, those for August being valued at \$208,641, those for September at \$360,641 and those for October at \$606,940. Thus the total exports of gum camphor to the United States during the first 10 months of the year amounted to \$1,534,672. The comparatively favorable price of the Hongkong gum accounts in part for the strong demand.

The camphor shipped from Hongkong is in its crude or unrefined state. It is classified locally as Fukien or Kwangsi, according to the Provinces from which it comes. It has been invoiced lately at \$2.15 c. i. f. San Francisco and has been selling in Hongkong at from \$252 to \$240 local currency per picul (133½ pounds) for the Fukien grade (at varying exchange, equal to about \$1.70 gold per pound). In October, under the pressure of heavy demand, prices went up to \$350 for the Fukien and \$340 (local currency) for the Kwangsi grades, or, at exchange then current, \$306 and \$315, gold—per picul.

These prices are to be compared with \$3.75, gold, per pound for refined camphor blocks in Japan. The Japan prices represent an increase of about \$1, gold, per pound over the prices obtaining at the corresponding period of 1918 and much more of an increase compared with normal prices. On the other hand, present local prices in Hongkong are not nearly so much above normal prices as the gold prices in the United States and Japan. The high value of silver exchange makes the difference and illustrates how difficult it is to export Chinese produce of any sort, save at very high prices in gold to equal ordinary prices in Hongkong and Chinese currency.

Toward the close of 1919 the prices of camphor in Hongkong under the pressure of unlimited demand advanced to a point where a large business could be done, limited, in fact, only by what the Chinese producers could secure in the time during which such prices should continue to obtain.

FRANK HEMINGWAY, INC., IN NEW MERGER

Frank Hemingway, Inc., 115 Broadway, New York, has been absorbed by the Sherwin-Williams Co., of Cleveland, Ohio. Mr. Hemingway has been engaged by the Sherwin-Williams Co. to carry out certain plans for expansion that are being formulated. There have been several changes in the staff, and the sales force of the Sherwin-Williams Co. is now located in the offices occupied by the Hemingway company.

Mr. Hemingway said: "The company known to the trade as Frank Hemingway, Inc., will be operated as a separate branch, I shall devote myself to the development department."

Frank Hemingway, Inc., has been in business about twenty years. In 1913 the company began the manufacture of chemicals and dyes at Bound Brook, N. J.

F. W. FROST & CO. EXPANDING

H. H. Foster, recently manager of the Dyes Intermediates and Chemicals Department of Frank Hemingway, Inc., and his assistant, F. W. Duerk, have joined the staff of F. W. Frost & Co., Inc., 60 Wall street, where Mr. Foster will be manager of the Chemical Department. This department will handle all matters pertaining to dyes, intermediates, chemicals, drugs, pharmaceuticals and allied lines. F. W. Frost & Co., Inc., have been important factors in the Oriental import and export trade for several years but have recently broadened their scope to include European markets. The Export Department has been reorganized and enlarged, with Charles A. McBride, formerly with G. Amsinck & Co., as manager. A branch office has been opened in London, and a branch in Shanghai is contemplated within a few months.

George R. Hillier, president of R. Hillier's Son Co., was the guest of honor at a reception by Amity Lodge No. 103 F. and A. M., Jersey City.

Heads of departments of J. L. Hopkins & Co. gave a luncheon to J. L. Hopkins, the president, in honor of the thirtieth anniversary in the trade.

Members of the Independent Fertilizer Manufacturers' Association met in New York recently and drew up an agreement to make the work of members more binding, one purpose being to unite the manufacturers in purchasing raw material in large quantities.

The Insecticide and Disinfectant Manufacturers' Association elected the following officers at the annual meeting Jan. 16 and 17, at the Hotel Astor, New York: President, H. W. Cole; secretary, C. C. Baird; treasurer, H. J. Schnell. A committee was appointed to consider a method of standardization of products.

The British Board of Trade announces that solvent naphtha, cresylic acid and mixtures containing cresylic acid have been restored to the list of British export embargoes. The item now includes coal tar, all products and derivatives thereof suitable for the manufacture of dyes and explosives, whether obtained from coal tar or other sources, and mixtures and preparations containing such derivatives.

The Roessler and Hasslacher Chemical Co. says: "The tendency in our line, and in fact in all lines of chemicals, continues upward. The fuel question, which threatened great loss and damage, has happily been settled for the time being. The threatened country-wide loss was not therefore brought to a reality, although some sections have suffered and are still handicapped with a considerable reduction in their output through fuel and raw material curtailment."

News of the Courts

Innis, Speiden & Co., New York, got a verdict for \$1,845 in the City Court against the Raritan Chemical Works for failure to receive or pay for 50,000 pounds of caustic soda as per agreement, according to the complaint filed by A. C. Rowe. The defense was a general denial put in by Hovoll, McChesney and Clarkson for the chemical company.

Attorneys for William Jay Schieffelin served an order of the Supreme Court on Mayor Hylan last week for his examination before trial of the libel suit brought against the Mayor by Dr. Schieffelin. Unless the Mayor makes some motion to either vacate or modify the order and thus delays proceedings the examination of the Mayor will take place on Jan. 23.

The National Gum and Mica Co., New York, has been sued by Jacques Abellini, who acted as agent for the sale of the company's products in France from 1916 to 1918. Abellini's complaint, filed by Joseph P. Nolan, says the company owes him \$20,000, and requests an examination of the books. Edward A. Alexander appears for the National Gum and Mica Co.

The Chromos Chemical Co. won the suit brought against it in the Supreme Court, by Samuel Stern through Benjamin Chess, who alleged that Stern lost \$2,500 by failure of the Chromos company to deliver 1,000 pounds of benzoic acid. The Chromos company through W. M. Clarke, attorney, and S. S. Menken, counsel, denied receiving confirmation of the order.

The Procter & Gamble Co. obtained a judgment for \$24,740 against Peters, White & Co. in a suit in the Supreme Court over 6,000 gallons of fish oil. Eugene Lamb Richards alleged in the complaint that Procter & Gamble owned several carloads of oil which Peters, White & Co. wrongfully appropriated. In the answer, Sullivan & Cromwell, attorneys for Peters, White & Co., denied all the allegations in the complaint.

In the case of E. I. du Pont de Nemours & Co. against the Norfolk & Western Railroad Co. for overcharge on shipments of sulphuric acid in tank carloads, from Hopewell, Va., to Gibbstown and Carney's Point, N. J., the Interstate Commerce Commission decided that a rate of twenty cents per hundred pounds is unreasonable. The Commission says: "We find that the rate on the shipments was unreasonable to the extent that it exceeded 15.2 cents per 100 pounds; that complainant made the shipments as described and paid and bore the charges thereon; that it has been damaged to the extent of the difference between the charges paid and those that would have accrued on the basis herein found reasonable, and that it is entitled to reparation with interest."

FIRE IN SCHIEFFELIN & CO'S BUILDING

The main warehouse of Schieffelin & Co., New York wholesale druggists and manufacturers, was threatened with destruction by a fire which started in the crude-drug department about four o'clock on Wednesday morning. The damage, resulting more from water than from the fire itself, has not yet been determined, but it is estimated that it will run into many thousands of dollars. Large quantities of botanicals, which at present are exceptionally scarce in this market and practically impossible to replace at this time, were burned, or ruined by water.

SENATE FINANCE COMMITTEE CONSIDERS BILLS TO PROTECT U. S. DYE INDUSTRY

New Plan Submitted by American Dyes Institute—John Wood's Amendment Places Control With Treasury Department—Trade Facts Submitted by a Manufacturer Who Compares Conditions in Germany and America

The Senate Finance Committee is now considering a variety of plans for protecting the dyestuff industry, including the Longworth bill in which is incorporated the licensing plan, a substitute bill submitted by the American Dye Institute, an amendment by John Wood, textile manufacturer of Philadelphia, and suggestions by the U. S. Tariff Commission. The Longworth bill and the licensing system have been published in DRUG & CHEMICAL MARKETS. The bill of the American Dyes Institute reads as follows:

"During ten years after the taking effect of this act, no product covered by the dutiable list in section 500 hereof, which is manufactured in the United States in quantity sufficient to meet the demand for domestic consumption, and in quality substantially equal to the standard for such product, prevailing in the industry on Aug. 1, 1914, and no product having substantial usefulness only as a substitute for a product so manufactured in the United States, shall be admitted to import. All questions of fact as to which of such products are entitled to admission to import shall be determined by the United States Tariff Commission, as hereinafter provided.

"The said Tariff Commission shall forthwith proceed to prepare, after investigation, a list to be known as the importable list of such products as may be found by it to fulfil the above requirements for admission to import. The said list shall be revised from time to time, and except as hereinafter provided no product not named thereon shall be admitted to import.

"Before any of the products named on said list shall be admitted to entry, the importer shall file with the Tariff Commission a notice containing sworn statements that the proposed import is either for current use or consumption by the importer, or desired in order to fill an actual bona-fide order from a domestic consumer for like current use or consumption. Said notices shall also state the name, chemical identification, strength and quantity of the proposed import, together with the name of the port of entry at which it is brought in.

"When, at any time, the commission shall find that notices received by it, of which copies have been transmitted to the collectors, cover a quantity of any product sufficient in the aggregate to constitute an excess over current consumption equal to six months' supply of the ordinary requirements of such product for domestic consumption, no copies of notices covering each product shall be transmitted to the collectors until the commission shall determine that the unusual quantity of such product in the United States is less than such six months' supply.

"The commission shall also prepare a second list to be known as the Conditionally Importable List, comprising all products, which while mainly useful as substitutes for domestic products, have special uses for which a domestic equivalent is not available. The said Conditionally Importable List shall state opposite the name of each product the said special uses. Any product named in such list may be imported, subject to the conditions hereinbefore provided, when, and only when, the notice covering the proposed import contains a sworn statement by an actual consumer, that the pro-

posed import will be used by him solely for one or more of the special uses stated in said list for said product.

"If at any time, complaint shall be made to the Tariff Commission that the price of any domestic product covered by the dutiable list of section 500 of this act is unreasonably high, the commission shall investigate, and if upon investigation the commission shall, after a hearing, determine that such price is sufficient to yield an unreasonable profit to every domestic manufacturer, it shall place such product on the Importable List during the continuance of such unreasonable prices. Two weeks' notice of such determination shall be given all domestic manufacturers of such product known to the commission before such product shall be placed on the Importable List.

Notwithstanding anything herein contained, any product covered by this act may be imported and stored in a United States Bonded Warehouse. No product, so imported, shall be released from such bonded warehouse or admitted to entry except as hereinbefore provided.

"Any person subject to the jurisdiction of the United States who shall, either as principal or as accessory, import or attempt to import or aid in importing any product covered by section 500 of this act otherwise than as herein provided or who in making any sworn statement required by this act shall wilfully misstate or misrepresent any facts shall be fined not exceeding \$5,000 or the value of such product at the time of importation, whichever shall be greater, or shall be imprisoned for not more than one year or both."

John P. Wood, of Philadelphia, leader in the opposition to the dye licensing system, has submitted a substitute amendment placing control of imports with the Secretary of the Treasury. It reads:

"Sec. 504. Whenever it shall appear to the satisfaction of the United States Tariff Commission (a) that a person is commonly and systematically importing, selling, or causing to be imported and sold any products enumerated in Section 500 of this act, under any agreement, understanding or condition that any person shall not use, purchase, or deal in, or shall be restricted in his using, purchasing, or dealing in such products of any person, or (b) that any person guilty of any other unfair method of competition in importation of products enumerated in Section 500 of this act, said committee shall certify that fact to the Secretary of the Treasury, and entry into the United States shall thereupon be refused to any such products sold, shipped, consigned, or manufactured by such person; Provided, That such act or acts be done with the intent, tendency, or result of destroying or injuring an industry in the United States or of restraining or monopolizing trade and commerce in the United States."

TARIFF COMMISSION'S SUGGESTIONS

The Tariff Commission has issued a statement on the situation which the Senate Finance Committee will take up for consideration. This fact seems to indicate that the committee has not decided finally just what course of action to pursue. An outline of the statement follows:

Among the subjects to which the attention of Congress is requested are the necessity of providing for recognizing licenses for the War Trade Board now outstanding, and the doubtful wisdom of undertaking to pay the expenses of administration of license fees to be fixed by the license authority or of seeking to meet any deficiencies out of customs revenues. Attention is also directed to the exceedingly complex administrative

problems connected with the undertaking to determine, as the bill requires, what will be reasonable terms as to prices, quality and delivery of domestic dyes, in the absence of which the importation of foreign dyes may be licensed.

The impossibility of meeting the unknown requirements of domestic consumers is commented on and the importance of stating clearly in the law whether licenses are to be withheld from middle men and speculators, and limited to dye-consumers, is pointed out. In view of the War Trade Board's experience provision is also advised for the reasonable allocation of licenses in the interest of all domestic consumers rather than the granting of licenses on the principle of "first come, first served."

Mention is also made of the propriety of providing in the law for the possible allotment of dyes to the United States by the Reparation Commission under the provisions of the pending peace treaty. It is further suggested that the proposed legislation does not at present take account of the fact that many licenses which may be granted by the license authority may be rendered inoperative through the control of numerous German patents, sold by the Alien Property Custodian during the war to the Grasselli Chemical Company, of Cleveland, Ohio, and to the Chemical Foundation. The Tariff Commission suggests that Congress may find it possible before enacting the legislation to secure from these corporations binding agreements to issue licenses under their patents, without discrimination and at definitely stated rates, to all recipients of import licenses.

MANUFACTURER'S VIEW OF DYE LICENSING

In a letter to members of Congress regarding the necessity for a dye licensing system, Mr. Kendall, of the Chemical Company of America, points out the commercial phases of the question. He says in part:

"The small manufacturer gives his business all of his time, puts his personal energy behind it, works fifteen hours or more per day in order to bring out a new product or complete a process. The research work, as for instance in our case, was and is under the supervision of one of the officers and it is due to this that our company was able to produce a greater number of intermediates far ahead of many of the larger concerns and it would continue, provided ample protection is given the industry."

"This company today is specializing in two dyes (which only one other concern is producing) and is supplying 50 per cent of the trade with its output. Plans are ready for the manufacture of six additional special colors which, however, it would not be able to manufacture if these colors are allowed to come in from Germany at low prices.

"The bill as it stands today, if it were passed, would give the industry but two years. Our experience in the manufacture of intermediates and dyestuffs since the early part of 1915 is conclusive proof that two years is not sufficient time in which to become so efficient as to be placed in a position to compete against the Germans, whose efficiency has been developed in the last forty years.

"The item of labor is an important one. The difference of the cost of labor today as compared with that of Germany is considerable. A letter was shown to me, wherein the price of labor in Germany on Nov. 15 was given as six marks per hour, which is considered exorbitant. Six marks at 2c equals 12c per hour against 50 to 60c per hour, which is the prevailing pay in America. In view of this difference, it surely will be an impossibility for any concern to compete with Germany with a protective tariff only."

Trade Notes and Personals

I. M. Clough, San Francisco, Cal., has been appointed representative of the Bon Ami Company.

Atlanta chemists are doing a rushing business analyzing moonshine liquor for evidences of wood alcohol, since the "blind death" scare swept the country.

Frank Foulk, who has been connected with the H. K. Mulford Co., Philadelphia, Pa., for over seventeen years, is now a representative of the Organic Salt & Acid Company, 81 Fulton street, New York. The company's new plant at Newark, N. J., has begun operations. The plant at Long Island City is still in operation.

James A. Farrell, chairman of the National Foreign Trade Council, announces that thirty foreign nations, representing Central and South America, Canada, Australasia and the Far East, will have trade advisers at the Foreign Trade Convention to be held in San Francisco in May. He says they will supply first-hand information concerning the markets of their countries.

The first of three Cantor Lectures, arranged by the Royal Society of Arts, was given on Dec. 1 by Prof. J. T. Hewitt, Emeritus Professor of Chemistry, East London College, the subject being "Synthetic Drugs." Professor Hewitt dealt briefly with the simple anaesthetics of the chloroform class, and the synthetic alcohols, such as amylene hydrate and chlorinated alcohols like chlorbutol.

Edward C. MacLaurin, president of the Massachusetts Institute of Technology, Boston, died of pneumonia last week. He was forty years of age, and was born in Scotland and educated at Cambridge University. He accepted the chair of mathematics in the University of New Zealand, but was called to Columbia University, New York, and then to the Massachusetts Institute of Technology. He had just succeeded in raising a \$4,000,-000 endowment fund, to which George Eastman added \$4,000,000.

Having rented the home of Dr. J. A. Crowther from the Cotton City Athletic Club, the Savannah Chemical Club, of Savannah, Ga., will make it a permanent home and club building. There are fifteen rooms fitted up as sleeping apartments aside from comfortable club rooms. Acting Secretary Baldwin Bridger says the club has not been chartered, but has 125 members and will perfect the organization soon. It is expected that J. Henry Allen will become president, and Mr. Bridger, the present acting secretary, will probably be elected secretary.

When testifying before the House Committee on War Expenditures, Frank S. Washburn, president of the American Cyanamid Co., of New York, said that a contract entered into with the Government in 1918 provided for a cent and a half a pound royalty being paid the company for nitrates manufactured for commercial purposes after the war. Mr. Washburn said his company received a fee of \$1,500,000 gross. Government officials felt that his company was entitled to this fee, but out of this amount about 85 per cent was deducted in taxes of various sorts, and extra expenditures made by his company which were not allowed by the Government cut into this amount further, with the result that his company made practically nothing.

U. S. OUTPUT OF SODIUM COMPOUNDS

Soda Ash and Caustic Soda—Production in 1918 Compared With 1917—Pre-War Prices for Potassium Salts Not Probable, Owing to Use of Sodium Compounds as Substitutes

A report on the various compounds of sodium consumed in the United States, compiled by Roger C. Wells, has been published by the U. S. Geological Survey, as part of "Mineral Resources of the United States." The sodium carbonate (soda ash) production in 1918 amounted to 1,390,628 short tons valued at \$35,635,520, compared with practically the same amount in 1917, valued at \$38,000,000. The sodium hydroxide (caustic soda) output was 513,363 short tons in 1918, valued at \$31,854,470, compared with 488,000 short tons in 1917, valued at \$29,402,689.

Although the present prices of many sodium compounds do not compare favorably with those of corresponding potassium compounds before the war, it is practically certain that pre-war prices for potassium compounds will not be again reached for a long time, so that the greater part of the substitutions that have occurred will be permanent. It may be noted that if the costs of production of sodium salts are equal to those of the corresponding salts of potassium per "molecule" the sodium salts have a slight advantage in lightness and hence in freight rates, as the atomic weights are 23 and 39, respectively.

The demonstrated inventiveness of the chemists and producers of the United States indicates that foreign competitors will not easily regain their former position in this country. Moreover, with one or two exceptions, raw materials are abundant in the United States, so that foreign competition will always have the handicap of the long ocean haul, although this may be cheaper than a long land haul. Obviously, however, a certain amount of international exchange is desirable, and it may be noted that although both imports and exports have increased in recent years the increase in imports has been due largely to sodium nitrate, whereas that in exports has been due to a considerable variety of manufactured compounds.

The price of soda ash in the United States was hardly affected by the European war until late in 1915 and early in 1916. Quotations then rose to several times the previous figures, but during the summer and fall of 1916 the price fell somewhat, and remained fairly steady until the summer of 1917. In September, 1917, the Government was bidding insistently for caustic soda and the price of soda ash advanced to its highest point—light soda ash in bags was quoted at \$4.20 a hundred pounds in the New York market. The price soon fell to about \$3, however, and remained there for nearly the whole of the first quarter of 1918. It then fell to nearly \$2, subsequently rose again to \$2.60, and when the armistice was signed began a decline that continued well into 1919, stopping at about \$1.50. The average price in 1918 was therefore considerably lower than that in 1917.

The imports of soda ash for consumption in the United States in 1918 were less than 1 ton, according to the records of the Bureau of Foreign and Domestic Commerce, Department of Commerce. In 1917 they amounted to 1,032 short tons, valued at \$70,080.

The exports in 1918 amounted to 119,217 short tons, valued at \$7,805,550. For the last six months of 1917, the only period for which figures are available for 1917, the exports amounted to 49,210 short tons, valued at \$2,884,569. The principal countries receiving this material in 1918, named in decreasing order of quantity exported to each, were Japan, Canada, Brazil, Australia

and Cuba. Japan received 47,442 short tons, valued at \$3,417,074, and Canada 36,613 short tons, valued at \$1,911,488.

The imports of caustic soda for consumption in the United States dropped from 146,236 pounds, valued at \$17,773 in 1917, to only 2,002 pounds, valued at \$193, in 1918, according to statistics compiled by the Department of Commerce. The exports in 1918 were 48,689 short tons, valued at \$5,602,813, of which Japan, Brazil, Canada, Cuba and Argentina received the largest quantities, in decreasing order of quantity exported to each. This compares with exports for the last six months of 1917 of 44,997 short tons, valued at \$5,832,598, going principally to Japan, Italy, Brazil, Argentina, Canada, Mexico and France.

POTASH PRODUCTION IN UTAH

(*Special to DRUG AND CHEMICAL MARKETS*)

Salt Lake City, Jan. 21.—With the payment of \$76,645 to the Salt Lake office of the Federal Land Office, the Utah Salduro Company has completed its application for patenting 1,543 placer claims, embracing 30,657.98 acres, from which it is producing potash in Tooele County, Utah, near the Nevada State line. The application is understood to involve the largest single group of mineral claims ever handled in the local office. Nearly \$2,000,000 is reported to have been spent by the Utah Salduro Company on the potash project in Tooele County. At present the concern is producing fifteen tons of commercial potash a day, and it is expected that this output will be considerably increased.

The property includes a stretch of salt land of the Great American Desert, west of Great Salt Lake. The brine infiltrates into an elliptical-shaped trench, twenty-five miles in length and is pumped from one large evaporation vat to another in a series, in each of which various salts are precipitated by solar evaporation. Common salt is the first to be dropped from the brine. The potash salts are the last to be freed, and this product is taken to a refining plant and prepared for market.

ZINC AND LEAD OUTPUT IN 1919

The mine output of lead and zinc in the United States declined greatly in 1919, following a sharp decline in 1918, according to a statement compiled by C. E. Siebenthal of the U. S. Geological Survey, Department of the Interior, from reports and estimates by producers and from the records of the Bureau of Foreign and Domestic Commerce.

The output of soft lead by mines of the Mississippi Valley and Eastern States was about 217,000 short tons, and that of argentiferous lead by mines of the Western States was about 208,000 tons, a total of 425,000 tons, compared with 267,095 tons and 314,470 tons respectively, a total of 581,654 tons in 1918 and to 273,095 tons and 377,854 tons respectively and a total of 650,949 tons in 1917, a decrease of over 156,000 tons in 1919 as compared with a decrease of 69,295 tons in 1918.

The production of primary metallic zinc from domestic ores in 1919 was about 446,000 tons, and from foreign ores about 13,000 tons, a total of 459,000 tons, compared with 492,405 tons and 25,522 tons, respectively, a total of 517,927 tons, in 1918. Of the output of domestic zinc in 1919 nearly 27,000 tons consisted of electrolytic zinc, as compared with 38,916 tons in 1918.

The average quotation for prime Western zinc at St. Louis in 1919 was 7 cents a pound, compared with 8 cents in 1918. The price of prime Western zinc began the year 1919 at 7.7 cents in the St. Louis market, declined below 6 cents in May, rose to nearly 8 cents at the end of July, dropped back nearly to 7

cents late in September, and then improved to the end of the year, closing at about 8.7 cents.

The production of primary domestic desilverized lead in 1919 was about 208,500 short tons, of soft lead about 150,000 tons, and of desilverized soft lead about 61,500 tons, making a total output from domestic ores of about 431,000 tons of refined lead, compared with 539,905 tons in 1918.

The average price of lead at New York in 1918 was 5.8 cents a pound, as compared with an average value of 7.1 cents in 1919. At the beginning of 1919 lead was quoted at 5.75 cents, but it went slightly below 5 cents in April and May, after which it steadily climbed until the close of the year, when it was quoted at about 7.5 cents.

COPPER OUTPUT IN U. S. IN 1919

The production of copper in the United States in 1919 was markedly smaller than in 1918, according to preliminary figures and estimates collected by B. S. Butler, of the United States Geological Survey, Department of the Interior, from all plants that make blister copper from domestic ores or that produce refined copper. At an average price of about 19 cents a pound, the output for 1919 had a value of \$243,000,000, as against \$471,000,000 for 1918.

According to the Bureau of Foreign and Domestic Commerce, the imports of copper in all forms for the first ten months of 1919 amounted to 346,855,000 pounds, against 575,800,000 pounds for the twelve months of 1918.

The exports of pigs, ingots, bars, plates, sheets, rods, wire and like copper products for the first eleven months of 1919, as determined by the same bureau, amounted to 496,350,000 pounds; the exports for the twelve months of 1918 were 744,429,000.

At the beginning of 1919 about 180,000,000 pounds of refined copper was in stock in the United States.

U. S. LARGEST PRODUCER OF TALC

America leads the world in the talc and soapstone industry, not only in production but especially in manufacture and use. The output of talc in the United States sold in 1918, according to J. S. Diller, of the United States Geological Survey, Department of the Interior, was 191,477 short tons, having an average value of \$10.91 a ton. This was a decrease of about 7,000 tons in production as compared with that of 1917 but an increase of more than \$200,000 in value.

Vermont produces the largest quantity of talc, but the output of New York is of greater value. California ranks third in quantity and value and, notwithstanding the general decline in production elsewhere in the United States in 1918, it more than doubled its output of 1917. The United States produced about 58 per cent of the world's output of talc in 1918 and in addition imported more than 11 per cent of all the talc produced by the rest of the world.

Virginia is the only great producer of soapstone in the world, shipping more than 15,000 tons in 1918.

Two shale plants are now being operated in the vicinity of Elko, Nev., one constructed by the Southern Pacific Company under the supervision of the Bureau of Mines and the other by the Catlin Oil Shale Co. Both plants are extracting high-quality paraffin oil from shale, and the processes employed are said to be highly satisfactory. Various methods will be tried out before larger plants are built.

The Monroe Drug Co., Quincy, Ill., is building a five-story structure, estimated to cost \$200,000.

Financial Notes

The Atlas Powder Company has declared the regular quarterly dividend of 1½ per cent on the preferred stock.

The American Chicle Co. has declared a quarterly dividend of one per cent, payable Feb. 2 on stock of record Jan. 15.

The American Glue Co. has declared a dividend of 4 per cent on the preferred stock; payable Feb. 2 on stock of record Jan. 15.

A quarterly dividend of \$1.75 has been declared by the National Lead Co. on preferred stock of record Feb. 26, payable March 15.

The Robert Gair Co., Brooklyn, boxboard manufacturers, and the Haverhill Boxboard Company of Haverhill, the Piermont Paper Company of Piermont, N. Y., and the Thames River Specialty Company of New London are to merge their interests. The companies will operate under the name of Robert Gair Company, but the plants in the merger will retain their name as branches of the Gair company. The acquisition of the companies will be arranged through an exchange of their shares for the new Robert Gair Company class A preferred stock. Its stockholders have authorized the issue of \$3,000,000 first preferred, \$4,000,000 of class A preferred without voting power and 400,000 shares of common of no par value.

QUOTATIONS ON CHEMICAL STOCKS

	Bid	Asked		Bid	Asked
Aetna Expl.	8	9	H'k Electro	70	75
Aetna Expl., pf....	67	68	H'k Elec., pf.....	65	75
Air Reduction ...	48	51	Heyden Chem.	5½	6
*Am. Ag. Ch.	90	92	*Int. Agricul.	19½	21
*Am. Ag. Ch., pf..	95	97	*Int. Agricult., pf.	80	81
Am. Chicle	88	91	*Int. Nickel	24	25
*Am. Chicle, pf..	80	84	*Int. Nickel., pf.	90	93
*Am. Cot. Oil.	51	53	*Int. Salt	70	71
*Am. Cot. Oil., pf..	88	92	K. Solvay	80	110
Am. Cyan.	30	35	*Mathieson Alk.	31	36
Am. Cyan., pf....	55	60	Merck & Co.	96	98
*Am. Druggists S. 14½	15	15	Merrimac	90	93
Am. Glue	40	45	Mulford Co.	55	60
Am. Glue, pf....	65	70	Mutual Co.	150	150
*Am. Linseed	79	80	*Nat. A. & C.	66	67
*Am. Linseed, pf..	95	96	*Nat. A. & C., pf.	87	88
*Am. Malt	44	47	National Lead.	81	83
Amer. Zinc.	10½	20	National Lead., pf.	108	110
Amer. Zinc, pf....	89	66	N. J. Zinc	260	272
Atlas Powder	153	160	Nlag. A., pf.	96	100
Atlas Powd., pf....	90	92	Parke, Davis & Co.	117	118
*Barrett Co.	127½	128	Penn. Salt	76	77
*Barrett Co., pf..	113	114	Procter & Gamble.	676	695
British Am. Chem. 8½	9	9	Procter & Gam., pf.	101	101½
Butterworth-Jud.	33	35	Rollin Ch.	50	60
By. Prod. Co.	107	115	Rol. Ch. pf.	80	90
Carborundum ...	135	135½	Royal Baking Po.	130	140
Carborundum, pf....	115½	116	Royal Bak. Po., pf.	90	93
Casein Co.	40	43	Semet S.	160	175
Celluloid Co.	135	145	Sherwyn-Williams.	520	540
Celluloid, pf....	...	...	Solv. Proc.	190	...
Corn Products	83	84	Stand. Ch.	90	100
Corn Products, pf..	106	107	Swan & Finch.	100	115
Davison Chem.	35	37	*Tenn. C. & Chem.	11	12
Dow Chem.	180	200	Tex. Gulf. Sul.	15¾	15½
Dow Ch., pf....	103	108	Union Carbide	74	75
Du Pont.	370	380	Union Sulphur	75	75
Du Pont, deb., pf..	92½	93	*Un. Drug	144	148
Du Pont, C., pf....	9	10	*Un. Drug 1st pf.	51½	52
Freepo. Tex. Sul. 32	32	34	*Un. Dyewood	50	61
Freepo. Tex. Sul. pf. 91	93	93	*Un. Dyewood, pf.	90	96
*Gen. Chem.	183	195	U. S. Gypsum. ....	...	...
*Gen. Chem., pf....	97	100	*U. S. Indus. Alco.	107½	108
Grasselli.	175	180	*U. S. Indus. Al., pf.	100	105
Grasselli, pf....	101	102	Va.-Car. Chem.	66	67
Hercules, Powder.	223	226	*Va.-Car. Ch., pf.	108	112
Hercules, Powd., pf. 107	110	110	V. Vivaudou.	22½	23

BONDS

	Bid	Asked
*Am. Agricul. Chem., 1st conv. 5s, 1928.	97	99
*Am. Agricul. Chem., conv. deb. 5s, 1924.	100	101
*Am. Cotton Oil deb. 5s, 1931.	88	89
*Int. Agricul. Corp., 1st Mort. & Col. tr. 5s, 1932.	83½	85
*Va. Carolina Chem., 1st Mort. 5s, 1923.	94½	95
*Va. Carolina Chem., conv. deb. 6s, 1924.	101	102

*Listed on New York Stock Exchange

Business Briefs

The Cosmo Morgan Co., California agents for Red Seal Lye, has moved its headquarters to the new Wholesale Terminal Building, Los Angeles, Cal.

The Certainteed Products Corporation started the new year at its Richmond, Cal., plant by going on a twenty-four hour production basis. Plans are being made for the erection of a paint and varnish factory.

The National Metal & Chemical Bank of London has concluded an agreement with Lithuania, Lettland and Estonia to take their entire flax output and sell it on a commission basis. The agreement means that credit has been advanced by the bank and the flax crop is taken as security.

The Californian and Hawaiian Sugar Refining Co., with plant at Crockett, near San Francisco, is making additions which will give the works a capacity of 2,200 tons daily, or 615,000 yearly. It is said to be the largest refinery in the world. The output in 1920 is estimated at 400,000 tons valued at \$100,000,000.

Commercial tests are being made at the Werringer copper mine, near Woody, Cal., of a leaching process invented by J. J. Nelson for extracting copper from oxidized ores with the use of chemicals. It is claimed that copper can be produced by this method for seven cents a pound, and that the process requires only six hours.

The Guaranty Trust Company of New York has issued a booklet, "Foreign Financing under the Edge Act," in which an outline is given of the purposes and functions of financial corporations organized for negotiating foreign credits and securities under this newly-enacted law. The full text of the law and a synopsis are also given.

Inauguration of a fortnightly passenger service of American flag steamers between New York and the West Coast of South Africa is announced by W. R. Grace & Co., to become effective this spring. The steamers, Santa Teresa and Santa Elisa, recently released from Government service, are to join the steamers Santa Ana and Santa Luisa now making monthly trips.

The American National Expositions, Inc., which is conducting the National Exposition of U. S. Manufacturers to be held at Buenos Aires, Argentine Republic, in November next, has the co-operation of the Argentine Department of Commerce, the American Chamber of Commerce in Buenos Aires and several banks in the United States which have South American branches. The New York offices of the company are in the Bush Terminal Sales Building, 132 West Forty-second street. Charles Fuller is president.

Advices from Vigo, Spain, say that the amount of gentian root gathered this year is estimated not to exceed 400 tons. Last year's yield was only 200 tons, but stocks from the previous year's crops were then available. The crop of 1916 amounted to 1,000 tons and that of 1917 to 500 tons. Prices in 1918 were 0.85 to 0.95 pesetas per kilo, or about seven and one-half to eight cents per pound, and because of these low prices no attempt was made to gather a bigger crop in 1919. Speculators are, however, reported to be holding their stocks until they can obtain 1.20 pesetas per kilo, or about ten and one-half cents per pound.

New Incorporations

Cromo-Chemical Corporation, Dover, Del., capital \$100,000. J. H. Marsten, A. Madison, L. Frank, all of New York.

The Weber Chemical Co., Dover, Del., capital \$50,000. Edward H. Weber, Edwin Stradburger, Philadelphia; Franklin L. Mettler, Wilmington, Del.

Suffolk Chemical Co., Chelsea, Mass., capital \$50,000. To make polishes. William Levin, Chelsea; William M. Berman, Roxbury; Robert T. Anthony, Hudson.

Gerbault, Inc., Dover, Del., capital \$300,000. Toilet preparations. M. L. Rogers, L. A. Irwin, W. C. Singer, Wilmington, Del.

E. Mackey & Co., Port Jervis, N. Y., capital \$20,000. Druggists. F. M. Griffin, B. Van Patten, E. Mackey, Port Jervis.

Crown Hypodermic Tablet Corporation, Buffalo, N. Y., capital \$50,000. L. and O. F. Seufert, G. C. Moore, Buffalo.

Tennessee Fluorspar Co., Dover, Del., capital \$100,000. John H. Kresage, Knoxville, Tenn.; W. J. Hibbs, Pittston, Pa.; Richard H. Hirzer, Nashville, Tenn.

York Products Corporation, Manhattan, capital \$24,000. Drugs and chemicals. S. F. Stern, A. Lowenstein. L. C. Tarasch, 5010 Twelfth ave., Brooklyn.

Titan Cellulose Co., Inc., Brooklyn, N. Y., capital \$10,000. Celluloid and pyroxylin. J. A. and D. Segal, J. O. Foote, 51 Chambers st., New York.

Federal Composition and Paint Co., Manhattan, capital \$500,000. H. P. Molloy, M. J. France, F. X. Hennedy, 25 Broad st., New York.

National Magnesite Products Corporation, Dover, Del., capital \$1,500,000. Magnesite mining. David H. McConnell, Suffern, N. Y.; Albert R. Palmer, Madison, N. J.; Edward Hall Faile, New Rochelle, N. Y.

George S. Coyne Chemical Co., Dover, Del., capital \$100,000. Dyestuffs. F. R. Hansel, J. Vernon Pimm, E. M. MacFarland, Philadelphia.

People's Drug Co., Dover, Del., capital \$100,000. Drugs and chemicals. E. U. Bradley, W. L. Maupin, Jr., McClarty Hadbeson, Lexington, Ky.

Cosmo Chemical Corporation, Dover, Del., capital \$100,000. General business of international merchants. J. Marster, A. Machson, L. Frank, C. R. Lientz, New York City.

Glandular Research Laboratories, Dover, Del., capital \$100,000. Chemical research. T. L. Croteau, H. E. Knox, S. E. Dill, representatives of Wilmington Del., trust company.

Werz Co., Brooklyn, N. Y., capital 500 shares common stock, no par value; active capital \$50,000. F. E. Varriale, N. Marks, A. B. Reed, 1950 Eighty-second st., Brooklyn.

B. Matzkowitz, Manhattan, capital \$10,000. Drug business. B. Matzkowitz, J. Feinblom, H. Moskowitz, 144 Blake ave., Brooklyn.

Sterling Magnesia Co., Manhattan, capital \$50,000. Chemical laboratory. A. Kemper, F. Cohn, G. Elson, 1400 Crotona Parkway East, New York.

George C. Cook Co., Manhattan, capital 200 shares preferred stock, \$100 each; 1,000 shares common stock, no par value; active capital \$25,000. G. C. Cook, B. T. Ryer, W. A. Shepard, 111 Broadway, New York.

Norwegian Nitrogen Products Co., Manhattan, capital, \$5,000. W. H. Campbell, H. M. Simon, A. W. Varian, 50 Pine st., New York.

Patents

Copies of patents may be obtained as follows: United States, 5 cents each; send to United States Patent Office, Washington, D. C.; French, one franc; send to M. M. Belin et Cie, 56 Rue des Frances-Bourgeoise, Paris, for patents of the years 1902-1907, and to L'Imprimerie Nationale, 88 Rue Vieille du Temple, Paris, for patents of later date. German, one mark; send to Patent Office, Berlin. British, eight pence; send to Patent Office, London. Postage must be sent for British patents. Stamps are not accepted in payment for U. S. patents. In ordering patents, the number, name of patentee and subject of invention must be stated.

Granted Dec. 16, 1919

1,324,786—William J. Beisel, Brooklyn, N. Y. Non-refillable bottle.

1,324,846—Hubert A. Richter, Long Island City, N. Y. Insecticide.

1,324,869—Guido Wolfermann, St. Louis, Mo. Bottle-stopper.

1,325,043—James B. Pierce, Jr., Charleston, W. Va. Process for the manufacture of strontium peroxide.

1,325,100—Thomas Martin, Newtown, Wellington, New Zealand. Non-refillable bottle.

1,325,129—Eric H. Westling, Antioch, Cal. Process of obtaining manganese.

1,325,145—Joseph D. Davis, Washington, D. C. Process of oxidizing phosphine and apparatus therefor.

1,325,203—John R. Mardick, New York, N. Y. Process of manufacturing aluminum chloride.

1,325,268—Lorenz Sosdian, New York, N. Y. Tooth-brush.

1,325,299—Rudolf Koetschau, Waldheim, near Hanover, Germany, assignor by mesne assignments, to The Chemical Foundation, Inc. Process of converting mineral oil of high boiling-points into products having lower boiling points.

Granted Dec. 23, 1919

1,325,561—Peder Farup, Trondhjem, Norway, assignor, by mesne assignments to Titan Co. A/S, Christiania, Norway. Process of producing refined titanium-oxygen compounds.

1,325,586—Wayne S. Scarles, Providence, R. I. Bottle-closure.

1,325,605—Clement W. Bailey, Harry S. Denny, and William H. H. Norris, Langwith, England. Production of ammonium sulphate.

1,325,660—Priscilla Sellers, Brooklyn, N. Y. Medicine dispensing device.

1,325,699—John H. Oesterhaus, Kansas City, Mo. Medicine injector.

1,325,711—Edwin D. Chaplin, New York, N. Y. Manufacture of acids.

1,325,712—Edwin D. Chaplin, New York, N. Y. Sulphuric acid manufacturer.

1,325,713—Edwin D. Chaplin, New York, N. Y. Manufacture of potassium carbonate.

1,325,799—George Ornstein, New York, N. Y., assignor to Electro Bleaching Gas Company. Process of preparing ampuls containing liquefied gas.

1,325,846—Henry B. Haviland, Ferry Road, New Brunswick, Canada. Acid valve structure.

1,325,859—William J. Phillips, Brooklyn, N. Y. Bottle-holder.

1,325,881—Franz A. Rody, Newark, N. J., assignor to Metallurgical Company of America, New York, N. Y. Recovering potash from leucite.

1,325,960—James E. Seeley, Los Angeles, Cal.; Ada R. Seeley administratrix of said James E. Seeley, deceased. Method for making lead pigment.

1,325,971—Kazue Akashi, Tokyo, Japan. Solid ink.

1,325,991—Samuel R. King, Glenbrook, Conn. Bottle-filling device.

1,326,003—Frank S. Spohr, La Fayette, Ind., assignor to Barbee Wire & Iron Works. Collapsible rack for bottles and jars.

1,326,045—Sigrud Giertsen, Odda, Norway. Process of converting cyanamid into urea and ammonium compounds.

1,326,056—Prevost Hubbard, Washington, D. C., assignor to The Iroline Company of America. Process of producing low boiling hydro-carbons.

1,326,122—Gerhard Nicolaas Vis, Paris, France. Process for regenerating oxld-of-nickel catalyzers employed in the hydrogenation of fatty bodies.

1,326,123—Gerhard Nicolaas Vis, Paris, France. Process for transforming alkaline metal monochromates into bichromates.

Reissues

14,773—Carleton Ellis, Montclair, N. J., assignor to Ellis-Foster Company. Process of obtaining cement and soluble potassium compounds.

Prof. Ebenezer Mackay, of Dalhousie University, Halifax, N. S., died on Jan. 6, aged fifty-six years, from an attack of pneumonia. He was born at Plainfield, N. S., and graduated at Dalhousie. Professor Mackay obtained his degree of Ph.D. at Johns Hopkins University, and in 1896 returned to Dalhousie to occupy the chair of Chemistry and Mineralogy, which he retained until his death.

Of Interest in the Trade

The Richards Chemical Works, Jersey City, N. J., has had plans prepared for an extension.

The Federal Composition & Paint Co., Brooklyn, N. Y., has had plans prepared for an addition estimated to cost \$29,000.

Southside Plantation, near Rodney, Miss., produced 11,000 pounds of pecans this season. They were sold at 39 cents per pound.

The Mathews Paint Co., Los Angeles, Cal., has awarded a contract for a two-story reinforced-concrete factory building, estimated to cost about \$40,000.

The Anderson Chemical Co., of Wallington, N. J., near Passaic, gave its employees insurance policies for \$1,000 each, on New Year's Day. John F. Myers is president and treasurer.

The Mason Paint Works, Alexandria, La., is installing machinery and equipment for the manufacture of paints, having a capacity of 75 gallons per day. J. R. Mason heads the company.

The Imperial Department of Agriculture in the West Indies has presented a plan to the Legislative Council at Kingston, Jamaica, for building a sugar factory, with capacity for 5,000 tons in a season. It is estimated to cost \$1,200,000.

W. S. Miller, vice-president and chairman of the board of directors of the Standard Oil Co. of California, has announced his retirement from active business. He has been associated with the California company since 1890, becoming vice-president in 1914.

The Hagedon Chemical Co., Indianapolis, Ind., is suing for an injunction against Veazy P. Rupe to restrain him from manufacturing certain compounds. Mr. Rupe claims to have originated the compounds. He was a member of the Hagedon company until recently.

A magazine of the Hercules Powder Co. at Hercules, Cal., exploded on the afternoon of Jan. 1, the loss being confined to the powder and the building, with no casualties. The magazine was located two miles from the acid works of the company, and the latter were uninjured.

The site of the old Peyton Chemical Co.'s works at Fairview, near Martinez, Cal., has been purchased by Charles Butters, former owner of the California Zinc Reduction Co., which has a plant on the property. The zinc works is now owned by a company headed by William Kent, of Kentfield, Cal.

The four-masted schooner Okanogan, owned and operated by Balfour, Guthrie & Co., has been wrecked on the island of Hanai, of the Hawaiian group, and is a loss, according to advices received at the San Francisco offices of the company. She had 751 tons of nitrates aboard when she was wrecked.

A new anaesthetic is announced by E. I. du Pont de Nemours & Co. It is said to eliminate pain without loss of consciousness and produces no nausea. The composition is described as "a new type of ether highly refined and modified by addition of certain gases which give to it new and desirable characteristics."

Books of Trade Interest

ORGANIC CHEMICAL REAGENTS. By Roger Adams, O. Kamm and C. S. Marvel. 8 vo., 79 pages. Published by the University of Illinois.

This bulletin contains methods for the preparation of thirty-two organic chemicals, especially in lots of one-half to five pounds, which have been studied during the past two years at the University of Illinois. But the methods described are in only a few cases new, and are in general those which already appear in the literature but with such details added as will enable a man who has had a reasonable amount of experience in organic chemistry to duplicate the results without difficulty. Explanation of the conditions to be observed in manufacture is given, and an endeavor has also been made to use procedures adaptable to large scale production, for example, the avoiding of extractions wherever possible; the substitution of a cheap solvent for a more expensive one; or the introduction of mechanical agitation, an extremely important factor in the success of many commercial processes. With each preparation a complete bibliography of the known synthetic methods is given, and wherever more than one method has been studied in the laboratory the results of each have been included.

With the results of these studies as a guide, advanced students, as well as manufacturers should experience no difficulty in preparing these organic chemicals which, previous to the recent war, were almost entirely of German origin. The University announces that a second bulletin containing the directions for thirty or more compounds is in the process of preparation.

EXERCISES IN CHEMISTRY. By William A. Noyes, director of the Chemical Laboratory, and B. Smith Hopkins, assistant professor of inorganic chemistry in the University of Illinois. 12 mo., 131 pages, New York, Henry Holt and Company.

This laboratory manual, intended to be used in connection with the senior author's "College Textbook of Chemistry," begins the subject by giving several valuable suggestions to the student and a number of paragraphs addressed to the teacher, and anyone who takes the time to read them will understand at once that they have been prepared by those who have qualified as successful laboratory instructors. The teacher is told that in the selection of material for the experiment the uppermost thought has been to present the material in a manner that will cause the student to think and reason, a process which represents a higher type of education than the training of the memory. To this end, many questions, both direct and implied, are scattered through the experiments with the double object of training the worker's observation and of teaching the fundamentals of the science.

Manipulative skill is an important factor in the student's success, and he is urged to form correct habits in the laboratory. In the chapter on manipulation most of the methods relating to procedure are described, as pouring from a beaker, filtering, washing precipitates, decanting, use of glass tubing, heating material in glass or porcelain, use of the balances, ending with precautions to avoid accidents. Then follow in succeeding chapters instructions relating to the preparation of pure substances, elements and compounds, each being supplemented by appropriate experiments to illustrate a fundamental law of chemistry. Throughout the book appear various quantitative experiments which are selected to develop the student's skill in manipulation and give him drill in calculations. Part II is devoted to class-room exercises, which include explanations of the various problems relating to laboratory work, followed by nearly four hundred problems to be solved.

The Drug and Chemical Market

Current Spot Quotations of Pharmaceuticals, Page 124; Crude Drugs, Pages 126-128; Essential Oils, Page 130

UPWARD MOVEMENT IN PRICES CONTINUES

Quinine Stronger, and U. S. P. and Denatured Alcohol Higher—Makers Advance Ether, Antipyrine and Terpin Hydrate—Camphor and Buckthorn Easier—Saffron, Star Aniseed and Ipecac Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

*Acetanilid, 2c lb.
Acid Oxalic, 2c lb.
Alcohol, U.S.P., 2c gal.
Denatured, 3c gal.
Antipyrine, 2c lb.
Asafoetida, 5c lb.
Aniseed, Star, 2c lb.
Spanish, 1c lb.
Condurango Bark, 1c lb.
Ether, U.S.P., VIII, 2c lb.
Anesthesia, 2c lb.
Formaldehyde, 5c lb.
Hexamethylene, 15c lb.
Ipecac, Cartagena, 2c lb.
Powd. Rio, Cart., 2c lb.
Witch Hazel Ext., 5c gal.

Declined

*Acid Tartaric, 2c lb.
Buckthorn Bark, 25c lb.
Cinchona Quills, Red, 10c lb.
Creosote Carbonate, 50c lb.
Elm Bark, Sel. bndls., 10c lb.
Camphor, Jap., 10c lb.

*Second Hands

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acid Salicylic	\$55	\$55	\$53	\$87
Calomel	1.68	1.68	1.68	1.84
Camphor, Jap., ref.	3.80	3.40	3.50	2.50
Glycerin, C.P.	.28	.25	.23	.20
Menthol	13.75	13.75	13.50	6.00
Opium, Gum	6.75	6.75	6.75	22.50
*Quinine Sulphate	.90	.87	.95	1.10
Cantharides, Russ.	3.75	3.75	4.00	3.50
Ergot, Spanish	5.00	5.00	5.00	2.50
Buchu, Short	2.85	2.35	2.35	2.65
Ipecac, Cartagena	3.50	3.25	3.10	4.20
Rhubarb, H. D.	1.75	1.85	1.85	.83
Cloves, Zanzibar	.49	.49	.52	.41
<i>*Second Hands</i>				

Restricted principally by a general and widespread shortage of stocks, trading in drugs and fine chemicals has been carried on in very fair volume during the past week. Demand from many consuming channels is active, and there is little question but that business would soon reach record-breaking proportions were it not for the large number of shortages. With few exceptions, the atmosphere of strength and steadiness continues to characterize the market.

Since the last report, quinine has steadied. Both U. S. P. and denatured alcohol are higher. Makers have advanced ether. Japanese camphor is easier. Spanish saffron, star aniseed, ipecac, lobelia herb, sandarac gum, helonias, wahoo bark of root and tragacanth ribbons are all higher. Buckthorn and selected elm barks have eased off a trifle. Cinchona quills and high-dried rhubarb are reported easier.

Fine Chemicals

Acetanilid—There is very little acetanilid available outside of makers' hands, and resellers are naming premium figures for their goods. For barrel lots, 60c a pound was reported for a second-hand sale. Manufacturers still quote 55c in 200-pound barrels for the U. S. P.

Acid, Oxalic—The acid is still very scarce, and holders in some quarters have stiffened up their ideas as to price. For kegs on the spot, 37c@38c a pound is named.

Acid, Tartaric—Second hands have moved their prices below the level of domestic manufacturers. For U. S. P. crystals, 67c is now the resellers' figure, while makers charge 69c. Powdered is quoted at 68c in second hands and 69½c by manufacturers.

Alcohol—The price of U. S. P., 190 proof, alcohol has been advanced to \$5.25 a gallon. There is a general scarcity of all alcohols. Denatured is now higher at 74c@75c per gallon for the 180 proof and 76c@77c for the 188. Methyl alcohol is practically unobtainable, except in small lots, at the premium figure of \$2.00 per gallon for the 95 per cent. Makers name \$1.56@\$1.63 a gallon nominally.

Antipyrine—Further reduction in the size of spot stocks has sent prices again to higher levels. Holders here are naming \$6.50@\$6.60 a pound and in some cases higher.

Camphor—There is reported to be somewhat of an improvement in supplies of camphor on the spot. Importers are selling Japanese slabs here now at \$3.30 a pound in cases, duty paid. American refiners are taking on orders now for immediate or near-by shipment in larger quantities, \$3.30 still being the price. For tablets, \$3.40 a pound is quoted.

Creosote Carbonate—Selling competition is extremely keen at this time, and plentiful supplies, combined with limited demand, have resulted in further price cutting. As low as \$4.00 a pound can be done with other quotations ranging up to \$4.25 and \$4.50.

Ether—On the position of ethyl alcohol and higher cost, makers have advanced the price of ether. For anesthesia ether, 23c is now ruling. U. S. P. concentrated is quoted at 19c a pound.

Formaldehyde—The acute scarcity of both wood alcohol and formaldehyde continues to drive the price of the latter skyward. For such small lots as are available here, the price is held all the way up to 50c a pound.

Glycerin—The firm position of glycerin is still noted. Refiners name 25c a pound for C. P., drums extra. Fifty-pound cans are named at 27c. Second hands are offering supplies at 24½c in drums. Dynamite glycerin is unchanged at 24c@24½c a pound.

Hexamethylene—On the scarcity and high cost of wood alcohol, hexamethylene is named higher at \$1.65 @\$1.70 a pound, although practically nominal at these figures.

Lycopodium—Small lots are passing at \$2.25 a pound. Some are asking \$2.50. No quantities are available on the spot at any price. Because most of it has been below standard, very little has been passed by the Customs authorities during the past few weeks, although several good sized shipments have arrived here.

Menthol—The recent activity in menthol has petered out, and although the price is very firm at the top figure noted after the advance, there is little or no buying taking place now. Such limited business as is passing is reported at \$13.75@\$14.00 a pound, duty paid. Prices are firmly maintained by sellers.

Quinine—The price of last week for Java, 87c, after passing below the level of the domestic manufacturers' quotation of 90c, induced considerable heavy buying in quinine sulphate. The trade apparently figures that the

price is not likely to go below 85c@90c. Many consuming interests who have remained out of the market since the price of Java quinine was up around \$1.25@ \$1.30 and whose stocks have run low, took advantage of the 87c quotations and covered for requirements. A new factor, which may develop into a strong bullish influence, is the apparent renewal of the influenza epidemic in various parts of the country. The best figure now for Java sulphate seems to be 90c per ounce. American makers still name 90c nominally.

Terpin Hydrate—A higher price has been announced for terpin hydrate by manufacturers, owing to increased cost of production. They now quote \$1.03@\$1.05 per pound.

Witch Hazel Extract—Prices are generally higher, according to seller and brand, ranging now from \$1.18 per gallon and up to \$1.25.

Crude Drugs

Asafetida—The market for the gum is slightly firmer, with holders disposing of goods at \$3.30@\$3.60 a pound, as to quantity. Powdered is still in light supply, with demand routine and price unchanged at \$4.75@\$5.00.

Aniseed—Star aniseed has suddenly jumped into demand, and the price has moved upward rapidly. Buying just at present is heavy, with the price firm at 23c@23½c a pound. Spanish aniseed is higher at 21c@21½c per pound.

Balsam Peru—The acute scarcity continues to maintain the price firmly at the recent advance, quotations naming \$5.25 a pound.

Buckthorn Bark—A new lot is now being offered on the market here at 80c a pound. Sales have been made during the week at this figure. Some small supplies, however, are being held for \$1.00. There is nothing in quantity to be had as yet.

Cinchona Bark—There are new importations of cinchona red quills available on the spot down to 85c a pound. Long quills can be had for \$1.00. Broken quills, according to test, range from 60c up to 85c a pound. All the bark coming in, however, is of very high cost, and lower prices are problematical.

Condurango Bark—More active demand has tightened up the position of condurango. Quotations now name 11c@12c a pound.

Elm Bark—Offerings of selected elm bundles are being made now at 65c@70c a pound, according to seller. The situation is slightly easier, although no large quantities are to be had. Grinding bark is unchanged at 30c@40c.

Ipecac—Both Cartagena and Rio ipecac roots are very strong, with an active inquiry. Prices show at higher levels, with sellers demanding \$3.50 a pound flat for whole root. There is little Rio to be had. Powdered is selling at \$3.75 a pound.

Insect Powder—Although 95c a pound for cases of pure powdered flowers can still be done by regular trade in some quarters, several holders have advanced their prices to \$1.05 and \$1.10 a pound.

Lobelia Herb—Another sharp advance, owing to the acute scarcity, has brought the price here up to 95c@ \$1.00 a pound. Sales are reported at this figure.

Poppy Seed—A jump in the price of Dutch seed has brought the price up to 60c@61c a pound. For blue Indian, quotations are higher at 35c@36c.

Rhubarb Root—Offerings of high-dried are reported at \$1.75 and lower in one case. The situation appears easier just at present. Powdered can be had at \$2.00 a pound.

Saffron—The limited stocks of Spanish saffron here are being held at a sharp advance. The generally quoted inside seems to be \$16.00 a pound, with nothing heard under this.

Sandarac Gum—Although new stocks at considerably lower figures are near by, the price for spot goods is higher at 80c a pound on temporary shortage.

Unicorn Root—The false is sharply higher at 90c@ \$1.25 a pound as to seller.

Wahoo, Bark of Root—An advance has brought the price up to 85c@90c a pound.

Tragacanth—Further advances bring No. 1 ribbons to \$5.50 a pound and No. 2 up to \$5.00.

Drug Trade News Notes

Imports of ginseng at Hongkong in 1919 were valued at \$2,400,000. The United States furnished about 80 per cent.

The Wolmark Chemical Co., New York, will occupy the buildings at 222 and 224 West 37th street after alterations have been made.

Controlling interest in the Hall Wholesale Drug Co., Springfield, Mo., capitalized at \$50,000, has been acquired by Dr. A. J. Sigler, president of the Citizens' Bank, of Mammoth Springs, Ark.

The W. J. Dean Drug Co., Kansas City, Mo., caused the arrest of the manager of the plant, and discovered \$10,000 worth of material in the basement of his house. It is said that the manager was about to start in business for himself.

The Parzon Chemical Co., Dayton, Ohio, is to enlarge its plant for the manufacture of physicians' supplies. Nathan Weinberger is president of the company; J. P. Shields, vice-president and general manager, and A. W. Schulman, secretary and treasurer.

Isadore Horovitz, owner of Horovitz's Pharmacy, Savannah, Ga., has purchased a site for a factory and will open a wholesale and manufacturing establishment in partnership with his brothers, M. and A. Horovitz. The laboratory will be in charge of G. L. Caldwell, a manufacturing chemist.

An injunction has been served on the Hill Products Co. to restrain the company from using the name "emulsified." The injunction was sought by the R. L. Watkins Co. to protect its trade-mark "Mulsified Cocoanut Oil." The decision was handed down by the United States District Court for the Southern District of New York.

Control of the Michigan Drug Co., Detroit, passed on Jan. 1 to new interests headed by John W. Smart, All common stock of the company, also known as Williams, Davis, Brooks & Hinchman Sons, has been sold to the new organization. The capitalization is \$600,000. Other officers of the new concern are Max Kahn, attorney, who will serve as vice-president; Frank Moulthrop, formerly of Seattle, secretary, and James S. Smart, treasurer. Those retiring are James E. Davis, president; Alanson S. Brooks, vice-president; Maurice O. Williams and the T. H. Hinchman estate. The business was founded in 1819.

The Essential Oil Market

Current Spot Quotations of Essential Oils and Aromatic Chemicals, Page 130

HIGHER PRICES FOR ESSENTIAL OILS

Oils of Lemon and Orange Advance Sharply—Ceylon Citronella Is Firmer—Spearmint Scarce and Higher—Western Distillers Raise Prices on Natural and Redistilled Oil of Peppermint—Menthol Quiet

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Oil Bergamot, 25c lb.	Oil Orange, Sicilian, \$1 lb.
Oil Citronella, 2c lb.	West Indian, 75c lb.
Oil Lemon, 25c lb.	Bitter, 75c lb.
Oil Peppermint, Nat'l, 10c lb.	Oil Spearmint, 50c lb.
U.S.P., Redistilled, 25c lb.	Thymol, 25c lb.
	Oil Peach Kernel, 2c lb.
	Delayed
Oil Cassia, Tech., 10c lb.	
Oil Cloves, 10c lb.	
Methyl Anthranilate, \$2.50 lb.	

Trend of the Market

	Today	Last Week	Last Month	Last Year
Oil Bergamot	\$5.00	\$4.75	\$4.75	\$7.00
Oil Citronella, Ceylon .....	.65	.65	.65	.51
Oil Cloves	3.65	3.75	3.90	3.00
Oil Lavender Flowers	10.75	10.75	10.50	6.50
Oil Lemon	1.80	1.55	1.35	1.70
Oil Peppermint	8.10	8.00	8.00	5.50
Oil Sandalwood, E. I.	10.75	10.75	10.50	13.00
Oil Sassafras, Artif. ....	.85	.85	.75	.50
Benzaldehyde, U.S.P.	1.50	1.50	1.25	5.60
Coumarin	8.25	8.25	8.00	15.00
Eucalyptol	1.50	1.50	1.40	1.30
Methyl Salicylate .....	.80	.80	.60	1.00
Vanillin	1.00	1.00	1.00	.85
Thymol	12.00	12.00	11.50	18.50
Menthol	13.75	13.75	13.00	6.00

Sharp advances in oils of lemon and orange have been the features of a steady and firm essential oil market during the week. In fact, all the Messina essences are markedly stronger, bergamot also sharing in the upward movement. Cable quotations and advices from Sicily name decidedly higher figures for shipment than are now ruling. Particularly in the case of oil of orange, which is scarce abroad, the price for futures laid down in New York is considerably above the present market here.

Outside of the Messina essences, business has been routine, although the group retains its generally firm position. Ceylon citronella is somewhat firmer. The scarcity of spearmint has developed a further advance in price. Western producers have raised the prices of both natural and redistilled oil of peppermint. Coumarin is easier. Thymol continues strong. The flurry in menthol seems to have died down.

Essential Oils

Oil Almond—The bitter oil is still reported to be in small supply and firm at the recently noted advance. Prices show no change since last week. Bitter oil, U. S. P., is quoted at \$10.00@\$10.25 a pound. For the free-from-prussic-acid grade, \$10.25@\$10.50 a pound is being named. U. S. P. benzaldehyde shows no change, quotations ranging from \$1.25 up to \$2.00 a pound, according to seller and quantity. For the pressed sweet oil, as low as 85c a pound is being done and as high as \$1.10 in different quarters. Peach kernel oil is firmer at 50c inside and up to 52c quoted.

Oil Anise—The leading dealers quote \$1.55 and \$1.60 a pound for U. S. P. oil of anise as the inside figure. Brokers, however, are finding goods at \$1.50 still. Quotations are firm, with business routine.

Oil Bergamot—On bullish cables from Sicily, the price of oil of bergamot has been advanced in all quarters this week. Inside seems to be \$5.00 a pound for coppers, although this cannot be done in all quarters, some naming \$5.25 firm as their best figure. Up to \$5.50, and in one case \$5.75, has been heard. The price in primary markets for near-by shipment c. i. f. New York shows at a sharply higher level than the prevailing figures.

Oil Camphor—Quotations are firm without marked change. One dealer is asking 30c a pound flat for the white Japanese oil. Others quote up to 29c for their goods. Single cans may be had at 31c a pound.

Oil Caraway—The general position of oil of caraway shows no change, remaining rather easy and dull. Prices are unchanged at \$4.50 a pound and up to \$4.75, according to seller. Demand is reported to be light at this time.

Oil Cassia—Somewhat of an improvement in both the oil and the spice is reflected in a slightly easier price in this market. Over 2,000 bales were imported at one time in a recent shipment. For the technical oil running 75-80 per cent cinnamic aldehyde, \$2.25 a pound can be done without difficulty. The lead-free oil is quoted at \$2.40@\$2.50 and the U. S. P. redistilled at \$2.75 a pound, although some are asking as high as \$2.85.

Oil Cedar—Any figure from \$2.10 a pound in one quarter up to \$2.50 in another for oil of the leaf is within the range at which business is being done. The generally quoted figures, however, are about \$2.25@\$2.35 a pound. The acute scarcity of oil of cedar wood continues, and little is available even at the high price of 35c a pound. Up to 37c is being asked by some sellers.

Oil Citronella—An active consuming demand has been reported for the past week or so, with a tendency for prices to firm up slightly. Although 65c a pound can still be done for Ceylon oil in drums, 67c and up to 70c are being named more frequently at present. It would not be surprising if the price went to 70c a pound inside for drums in the near future. Java citronella oil is quiet, ranging from 95c up to \$1.05 a pound, as to seller.

Oil Cloves—Down as low as \$3.50 a pound can be done for oil of cloves in cans in this market now. Leading dealers are asking \$3.65 a pound and for some special brands up to \$4.00 and higher. Smaller lots in bottles can be had from \$3.60 to \$3.80 a pound. The market is quiet, with demand confined to routine requirements.

Oil Juniper Berries—The market for oil of juniper berries remains very quiet, with demand reported as small. Prices are unchanged at the levels of last week; for \$6.25 a pound is the best price heard, although it is very probable that this can be beaten without great difficulty. The highest figure noted was \$6.65 a pound from a leading dealer. Double rectified oil is available up to \$8.00.

Oil Lavender Flowers—One seller is still naming his price as \$10.50 a pound for the U. S. P. oil. Most dealers are quoting \$11.00 a pound and in some instances as high as \$11.50. Stocks are still light here.

Oil Lemon—The best figure for oil of lemon which is being quoted by some importers in this market now seems to be \$1.80 a pound. Brokers are offering to find \$1.75 sellers. For special brands as high as \$2.25 a pound is named. The product shows marked strength. The situation in Sicily shows prices sharply higher and tending upward, as a result of a combination of very small actual spot stocks of oil in primary markets and the position of Italian exchange.

Oil Linaloe—In spite of the small supply here and a recent advance which some sellers made in their prices, moving them up to \$7.00@\$7.25 a pound, one leading essential oil house is still delivering goods from their stock at \$6.50.

Oil Orange—The orange oils have held the center of the essential oil stage during the week. Sharp advances in both Sicilian and West Indian oils have been noted. Stocks of both oils are growing very small here, and reports from primary markets state that the diversion of the fruit to other channels has curtailed pressing operations as well as reducing their supplies of fruit and oil materially. There is very little spot oil available for immediate shipment at the sources of supply. Quotations in this market for Sicilian oil range from \$6.40 up to \$6.50 and higher in some cases. West Indian oil is quoted at \$5.00@\$5.25 a pound now. Bitter oil is also higher at \$4.50@\$5.00 a pound.

Oil Peppermint—Producers name \$8.50 for natural oil. In resellers hands, the best figure heard is \$8.10. There is very little to be had here. U. S. P. re-distilled oil is available at \$8.75 and up to \$9.00. There is practically no buying except the smallest kind of routine purchases at these figures. Second-hand lots at figures sharply lower than producers' quotations are not moving.

Oil Sandalwood—The position of sandalwood oil continues strong. Although \$10.75 a pound can still be done without great difficulty, some sellers have raised their prices to \$11.00 and \$11.25 a pound.

Oil Spearmint—Oil of spearmint is practically nominal here. There is little demand, and stocks are very low. The price for such small routine purchases as are being made has been advanced to \$13.00@\$13.50 a pound.

Oil Wormwood—The acute scarcity of wormwood oil continues. There is practically nothing to be had. Such small quantities as are available are being held at \$12.00@\$12.50 a pound. The \$12.00 figure is doubtful now.

Aromatic Chemicals

Coumarin—A falling off in demand, coupled with somewhat freer offerings during the past week, has eased the position of coumarin. Offers at \$8.00 a pound are reported to be quite numerous now. However, some holders are demanding \$8.25 and \$8.50 a pound for their goods and refuse to shade the price at this time.

Menthol—The renewal of activity in menthol did not last long. Buyers did not enter the market, and although the price now stands higher at \$13.75@\$14.00 a pound duty paid, there is little or no business passing.

Methyl Anthranilate—One leading house has reduced their range of quotation for methyl anthranilate to \$12.50@\$14.00 a pound.

Thymol—The market is still characterized by scarcity, and the price shows a trifle firmer this week. Holders are quoting \$12.00 up to \$12.25 a pound here.

G. R. Parker, representing Frazar & Co., of Seattle, is on a business trip through Japan, China and the Philippines. He expects to close arrangements for new accounts handling oils and copra.

GERMAN AROMATIC PRODUCERS WARNED

"Deutsche Parfumerie Zeitung" of Berlin Says Export Prices Are Too High—Will Drive Buyers to Other Markets—Case of Coumarin Cited

A warning to German aromatic chemical manufacturers who have been quoting too high prices on foreign inquiries has been sounded, pointing out the danger of driving the buyers to other sources for their goods. Many aromatics are now being made in America which formerly came exclusively from Germany, and in order to discourage the continuance of this new manufacture and also discourage an extension in the number of products now being turned out in America and other countries, the German producer is urged to study markets and prices closely and when quoting on foreign business to name his price with discretion.

A translation of abstracts which appeared in the "Deutsche Parfumerie Zeitung" of Berlin, Germany, under date of Nov. 25, 1919, follows:

"The National Convention and the trade journals, as well as the daily papers, of late, have been advocating the sale of chemicals and related products at high prices. In other words, not to offer organic chemicals of this type at low prices. In order to give the German manufacturer an inside of the situation as it exists in the foreign market, the following is presented for their attention.

"As much as it is desired, and as much as we feel that it is necessary for us to get as high prices as possible for goods of German manufacture, if only for the purpose of establishing a credit in our favor in foreign lands, in order to be able to purchase certain raw materials, we warn the manufacturers from charging too high prices for their materials to foreign firms, as very often it has been found that prices quoted to foreign manufacturers have been higher than prices obtainable in those countries.

"For the purpose of demonstration, we quote the following: An American firm was interested to procure large quantities of coumarin, through a Dutch house. Our price (German price) for coumarin at that time was two hundred marks for a kilo. Two hundred marks was equal to 24 Dutch florin. The German manufacturer thinking that he could get a high price for this product, asked 60 florin for a kilogram from this Dutch firm. The Holland merchant complained that that price was too high and that he could not procure business at that rate, and ten days later the German manufacturer reduced his price to 45 florin. The American concern knowing that the German price was but 24 florin gave the Holland house a 30 florin limit per kilo, f. o. b. Hamburg. On account of the anxiety of procuring these high prices, this order was lost, although it would have been very easy to fill the entire order from the stock available in Germany, without having to manufacture new goods.

"As far as the American market is concerned, that amount of coumarin entering into the field would have prompted the present American manufacturers to close their factories and give up the manufacture of this product for good, because we understand that there is a preference for foreign coumarin in the United States, but on account of the German product having been kept out of the United States by asking much higher than the domestic price, it gave the American manufacturers a further chance to continue working at producing this product and if they will be given still a longer chance, they might produce coumarin low enough to compete with the German manufacturer. The result was that this German industry lost a consumer for this product."

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, Pages 132 and 134

COPPER SULPHATE MOVING FREELY

More Brisk Demand for Muriatic Acid—Bleaching Powder Is Higher—Spot Markets Are Bare of Materials—Contracts Being Renewed Under Favorable Conditions—Sulphuric Acid Stronger

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Bleaching Powder, dom., 25c per Bleaching Powder, export, 25c
100 lbs. per 100 lbs.

Copper Sulphate, 25c per 100 lbs.

Declined

Acetic Acid, Glacial, 3/4c lb.

Trend of the Market				
	Today	Last Week	Last Month	Last Year
Acetic Acid, Glacial.....	lb. \$12	\$12%	\$12%	\$10%
Sulphuric Acid, 66 deg.....	ton 22.00	22.00	18.00	28.00
Bleaching Powder.....	100 lbs. 3.00	2.75	2.50	2.75
Copper Sulphate.....	100 lbs. 8.25	8.00	8.25	9.50
Potash, Caustic.....	lb. .30	.28	.28	.74
Sulphur, gran.	lb. .14	.14	.13%	.27
Soda Ash, 58 p.c.	100 lbs. 2.00	2.00	2.00	2.50
Caustic Soda, 76 p.c.	100 lbs. 4.25	4.30	3.30	4.30
Potassium Bichromate.....	.27	.27	.26	.45

The heavy chemical market continues quiet. Supplies of most materials are being diverted to contract buyers. Spot markets are bare of most commodities. Increases are noted in the prices of bleaching powder and copper sulphate. There is a large movement of copper sulphate for agricultural purposes reported, which is unusual for this season of the year. Movement of muriatic acid is becoming brisker but not enough so to warrant an increase in price. Contracts have been renewed in most cases under favorable conditions.

Acid, Acetic—Demand continues light for domestic shipments with export demand weakening slightly. Quotations of 12c per pound for the glacial in barrels are given, with a tendency to shade this to move stocks. Carboys and demijohns are quoted proportionately higher. Markets for the lower grades are obtained by shading the quoted prices of 8½c per pound for commercial, 9c for redistilled and 9½c for the 80 per cent pure.

Acid, Muriatic—Demand for this material is heavier, and good contract business is reported during the past week. Supplies continue good. Little change is noted in prices. Tank-car shipments of 20-degree acid are offered f. o. b. works at \$1.50 per 100 lbs. and carboys at \$1.65@\$1.75 per 100 lbs. The 18-degree acid brings 25c per hundred less and the 22-degree acid 25c per hundred more than the 20-degree material.

Acid, Sulphuric—Demand for all strengths of sulphuric acid is quite active. Many buyers are in the market for contracts covering long periods. Very low prices are rumored in some quarters, but generally the market is firm with an upward tendency. Sixty-degree acid is generally held for \$15.00@\$16.00 per ton for spot delivery and \$20.00 on long-time contracts; 66-degree acid is strong on spot at \$22.00@\$25.00 per ton, with \$21.00@\$22.00 quoted on contract. Oleum shows a much stronger tone at \$23.00@\$27.00 per ton, with strong demand on contract at the lower price.

Alums—The shortage of supplies keeps this market firm. Very little material is available for spot delivery, but contracts for future delivery are being made at

firm prices. Lump ammonia alum is quoted at 4c, ground at 4½c@4½c and powdered remains firm at 4½c@4½c per pound. Limited offerings of chrome maintain a strong price of 15c@16c per pound. Occasional odd lots of U. S. P. potash alum are to be found for less than 8c per pound, but generally this price holds.

Aluminum Sulphate—Trading in this commodity is largely routine. Little activity outside of contract business has permitted the firm prices of \$1.75 per cwt. for the commercial and \$2.75 per cwt. for the iron-free material to remain unchanged. Attempts to force these prices up have failed.

Arsenic—Supplies are scarce, and the price of 11c per pound quoted is for large quantities. Bids of 9¾c per pound have been heard on material expected from the Orient in March and April. The market is practically bare of material for spot delivery. Red arsenic is firm at 22c per pound with light offerings.

Ammonia Water—The market for this material is entirely nominal. No material is in sight, and it will probably be some months before there will be any appreciable surplus to offer for spot buyers. The effect of the coal strike is still felt in this market. A firm price of 8¾c per pound is asked for 26-degree material in car lots.

Ammonium Chloride—Strong markets are reported for the white lump and granulated at 15½c@16c for the former and 25c@26c per pound for the latter. Small quantities of lump are bringing as high as 28c per pound. Grey is slow at 12½c per pound.

Ammonium Sulphate—This market is entirely nominal. Reports of sales at \$7.75 for export continue. The spot market will probably be bare for some months.

Barium Chloride—Heavy demand and limited supplies of both domestic and foreign material have kept the price firm at \$95.00@\$105.00 per ton.

Bleaching Powder—The demand continues heavy in spite of rising prices, with supplies largely in second hands. Domestic deliveries are being made at \$2.75@\$3.00 per cwt. f. o. b. works, and export shipments are being made at \$3.25@\$3.50 per cwt. Greater activity is reported with some material on spot.

Chlorine—The movement of this material is largely routine, and the price continues firm at 9½c@10½c per pound.

Copper Sulphate—The growing sales of this commodity have resulted in a firm rising market. Demands from agricultural sources are coming in and have forced the market up to \$8.25 per cwt. for the lump crystals.

Carbon Tetrachloride—The price continues at 11c per pound, with the greatest movement on contract.

Fluorspar—Little activity is reported, with a nominal price of \$52.00 per ton. Spot stocks continue scarce.

Glauber's Salt—Carload business at \$1.15 per cwt. continues, with small lots being held for \$1.25@\$1.35 per cwt.

Nickel Salts—Strong demand is reported for both the single and double salts. The single salt is held at 16c per pound. The double salt has been rising on account of the scarcity of ammonia. A price of 14c is heard in some quarters, but orders are not being booked be-

low 15c. Some off-grade by-product nickel sulphate is finding its way into the trade at prices around 10c per pound.

Potassium Chlorate—Heavy export demand is noted for American chlorate. The price remains firm at 15c per pound, in spite of offerings of Japanese material at prices as low as 12½c per pound.

Potassium Carbonate—Demand is heavy and supplies scattering. The 80-85 p. c. is quoted at 24c@25c per pound and 85-90 p. c. at 27c. Some movement of the 90-95 p. c. material is reported at 40c per pound. Little of the high-grade material is available at any price.

Potash, Caustic—This material is largely in producers' hands. The 88-92 p. c. solid is quoted at 28c@32c per pound.

Potassium Bichromate—Little change is reported in this market, with small lots still available for spot delivery. The price is held at 28c.

Potassium Prussiates—Movement in these materials is confined to small lots. Supplies, however, are short for spot deliveries. Yellow is held at 35c@38c per pound and the red at 95c@\$1.05 per pound.

Soda Ash—Spot demand continues good at \$2.00@\$2.25 per hundred pounds. Little is offered by producers, except on contract. Contracts are being made for domestic delivery at \$1.62½@\$1.72½.

Sodium Bicarbonate—This market shows a firmer trend, with prices tending upward. Spot sales are being made at \$2.40 per hundred f. o. b. New York or \$2.15 f. o. b. works.

Soda, Caustic—Limited export business is being done at \$4.25 per hundred pounds f. a. s. New York. Stocks continue short. Makers are offering contracts at \$3.00@\$3.25 per hundred to domestic consumers.

Sodium Nitrate—The spot market for this material is bare, with little prospect of relief before March or April. Nominal prices are given as \$3.30@\$3.40 per hundred pounds. Futures are quoted slightly lower at \$3.25@\$3.35.

Sodium Nitrite—No stocks are available at any price. Nominal prices of 14c@15c per pound are given. Supplies are not expected to be available until March. Material is quoted c. i. f. Norway at around 13c@14c per pound.

DON'T CALL COLUMBUS 8200

Pratt and Pearl streets have been chuckling over a story that has been going the rounds of the chemical trade. One of the brokers, emulating the illustrious example of that gifted advertisement writer, Dr. Bechdolt Bear of Campbell Funeral Church fame, has been admonishing the trade to "Call Cortlandt 'Steen when you want caustic soda." Someone took him at his word the other day, and the following conversation is said to have taken place.

"Hello. Hamfat? Will you quote me firm on a hundred and fifteen tons of caustic, monthly, during 1920, f. a. s. Duluth?"

"F. a. s. where?"

"Duluth—two to Duluth, you know. Leading seaport of Minnesota."

"Oh, yes. It's for export, then?"

"Sure, export to Guam."

"Oh, yes, to be sure, to Guam. How much do you want?"

"Hundred and fifty tons monthly during the year."

"I'm afraid that we couldn't give you that firm."

"Sure you couldn't. Well, Hamfat, old man, I called Cortlandt 'Steen for caustic, and I guess I said something, eh?"

PERKIN MEDAL AWARDED TO DR. CHANDLER

Dr. Charles F. Chandler, technical advisor to the Chemical Foundation, who resigned the chair of chemistry at Columbia University in 1911, received the Perkin gold medal awarded to him by the Society of Chemical Industry for his notable scientific achievements. The presentation of the medal to Dr. Chandler took place in the auditorium of the Chemists' Club.

Dr. Chandler is regarded as the founder of the American Chemical Society, which from thirty-five members has now grown to a membership of more than thirteen thousand. The influence of Dr. Chandler reached in many directions. He was advisor to the sugar, petroleum, illuminating gas and photographic industries; made important researches which led to a greater production of caustic soda and other commodities, and originated important processes of large scale chemistry.

Industrial Chemical Notes

The Atlas Powder Co., Tamaqua, Pa., has resumed operations in its sulphuric acid plant, which has been idle since the signing of the armistice. The company has orders sufficient to keep the plant in operation for a year.

The Union Acid Works, of Baltimore, has been organized by George A. Whiting, president of the Standard Wholesale Phosphate Co., and will erect a plant at Curtis Bay, Md., for the manufacture of sulphuric acid, at a cost of \$1,000,000.

Considerable quantities of peroxide of sodium, oxalic acid (crystals) and hydrochloric acid are purchased by the forty silk filatures of Chefoo, China. Chefoo is an important center in the manufacture of hair nets, and it is reported that these manufacturers import peroxide of hydrogen in connection with the bleaching of hair.

One of the outstanding developments in the market at Baltimore for crude fertilizer materials is a sharp advance in the quotations on nitrate of soda. The price has gone up to \$3.40, against \$3.02½ not long ago, the rise being attributed to small receipts and active inquiry; also the coal strike, which caused a virtual embargo upon the movements of vessels.

At the annual meeting of the Cleveland Chapter, American Chemical Society, Col. F. M. Dorsey was elected chairman of the section. Other officers named were: Vice-chairman, Dr. W. O. Tower; secretary-treasurer, W. R. Mott. Counselors—L. C. Deefahl, Hippolyte Gruenner, A. W. Smith, George Oenslager. Board of managers—A. W. Smith, Hugo Shapiro, W. M. Clark, R. D. Landrum, H. D. Batchelor.

The first direct shipment received at Baltimore from Germany arrived Jan. 12, when the steamer Canibas from Hamburg brought 7,730 tons of German potash, 4,230 tons being manure salt and the rest muriate. This is the largest quantity of German potash to reach Baltimore since the beginning of the war, and it was promptly taken up by fertilizer manufacturers. While potash from Alsace has been quoted by the importers at \$20 for 14 per cent kainit, \$30 for 25 per cent manure salt and \$85 for 80 per cent muriate, the material has been in reality bringing much more, and sales of muriate on the basis of \$150 have been reported, with the demand far from satisfied even at that figure.

The Color and Dyestuff Market

Current Spot Quotations of Colors, Dyestuffs, etc., Pages 132-134

RESORCIN MAKES SHARP ADVANCE

Scarcity of Aniline Oil Reflected in Prices of Other Intermediates—Rising Cost of Methyl Alcohol Also Affects Market—Metanitraniline and Paranitraniline, Alphanaphthol and Naphthylamine Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

	Advanced	Metanitraniline, 15c lb.	Resorcin, 25c lb.	Alphanaphthol, 10c lb.
Aniline Oil, 1c lb.				
Aniline Salt, 3c lb.				
Dinitrobenzol, 3c lb.				
Anphthalylamine, 7c lb.				
	Declined			
	No Declines			
	Trend of the Market	Today	Last Week	Last Month
		Last Year		
*Benzol, C. P.	...gal.	\$.27	\$.27	\$.25
Naphthalene, flake	...lb.	.07	.07	.06
Phenol	...lb.	.12	.12	.12
Xylool, pure	...gal.	.40	.40	.40
Toluol, pure	...gal.	.28	.28	.26
*Aniline Oil	...lb.	.34	.33	.30
Benzaldehyde	...lb.	.65	.65	.65
Betanaphthol, dist.	...lb.	.55	.50	.50
Paranitraniline	...lb.	1.30	1.15	1.00
o-Tolidine	...lb.	.25	.25	.25
*Nominal				1.00

Sharp advances in several items of the intermediate field were noted during the week. Scarcity of most materials leaves the market largely nominal, as they are practically unobtainable. Aniline oil and derived intermediates are very scarce, and prices continue to advance. Dimethylaniline reflects both the aniline and the methyl alcohol markets in its rising price and scarcity. Resorcin shows the most spectacular rise, closely followed by meta- and paranitraniline, alphanaphthol and naphthylamine. Foreign demand, especially from Japan and Spain, continues active. Spot materials are seized as soon as offered. Coal-tar crudes continue to reflect the effect of the recent coal strike in the stringency of the market. Benzol producers are not willing to promise shipments before March. Production is still months behind demand. Naphthalene is not offered for spot delivery, and toluol buyers must be content with February deliveries. Phenol continues in strong export demand.

Hematine and logwood are nominal with no relief in sight. Demand continues quite strong with little or no material offered. Brazil wood and extract are in light supply with fairly strong demand.

Domestic colors continue in good request both for domestic consumption and for export. Active demand for Swiss colors continues and prices remain firm, in spite of comparatively large importations.

Intermediates

Acid H—Demand continues far in excess of supplies. The spot market continues practically bare with offers of \$1.70 in some quarters.

Acid, Naphthionic—Market for this acid continues good. Scattered stocks of refined are offered at \$1.00 @ \$1.10. An easy market for the crude at 65c@75c is reported.

Acid, Phthalic—Steady demand continues at 55c@60c, while the anhydride shows quite a fluctuation at 60c@90c per pound with an easy market.

Acid, Sulphanilic—Market for the refined acid is steady with spot material at 35c. Demand is steady at

this price, although consumers report contracts as low as 25c.

Aniline Oil—Spot market continues nominal at 34c@36c per pound with little material in sight. Contract demand has been on the increase with some contracts reported at 34c f. o. b. works.

Aniline Salt—Spot material is even scarcer than last week with an increased demand at 45c@48c per pound.

Alphanaphthylamine—This material continues in good demand with offerings light. Prices are variously quoted at 40c@45c, but the market is largely nominal.

Betanaphthol—Little change is noted in this item with supplies for spot delivery or short-time contract very short. Contracts as low as 45c per pound are reported, and spot material is quoted at 55c per pound.

Dinitrobenzol—Market for this material shows a good demand at 29c@33c per pound with supplies somewhat less plentiful.

Dimethylaniline—Demand for this material continues stronger, probably on account of the entrance of manufacturers into the basic dye field. Japanese demand has practically bared the market of spot material. Scarcity of raw materials holds the price steady with a rising tendency in spite of increased production reported in some quarters. Spot material is held at 90c @\$1.00 on a purely nominal basis.

Dinitrotoluol—Good demand continues for this material at 38c@40c. Normal movement is reported.

Diphenylamine—Little change has been noted in this market. Material continues scarce with quotations on a largely nominal basis reported as 65c@75c dependent on time of delivery. Spot material is quoted at 80c.

Metanitraniline—Stocks of this material are limited. A quotation of \$1.00@\$1.05 per pound is reported in some quarters on a nominal basis.

Monochlorbenzol—Little change in this commodity. Prices are held firm at 8½c@10c per pound.

Para-amidophenol—Little change is reported with the base held at \$2.75@\$3.25 per pound, depending on the seller and the hydrochloride at \$3.00@\$4.00 per pound. Requirements continue heavy, especially on contract.

Paranitrotoluol—Stocks continue limited. Quotations are reported at \$1.15@\$1.40 per pound for prompt delivery.

Paranitraniline—This material is quoted on a nominal basis at \$1.30@\$1.35 per pound. Little spot material is available. Some contracts are reported at lower figures. Demand is steady.

Paratoluidine—Conditions remain little changed. Spot stocks are running lower, but prices are maintained at \$1.75@\$2.00 per pound.

Coal-tar Crudes

Benzol—Production is still far below normal, and little material is available. Prices are quoted on a nominal basis as 27c@31c per gallon for the C. P. grade, according to quantity. Producers are diverting practically their entire output of this material to contract purchasers. Spot material in some cases is not expected before March.

Naphthalene—This market continues close, so far as spot business is concerned. The flake material on a nominal basis is quoted at 7c@8c per pound. Naphthalene balls are slightly easier at 7½c@8½c, with some material offered for spot sale.

Phenol—Export material continues scarce. Nominal quotations of 24c@25c per pound are reported in some quarters. Domestic supplies are moving under a heavy demand at 12c@16c per pound. The shortage of stocks is widely felt in this market for export.

Toluol—Nominal prices only are available in this commodity. Shipments in some cases are promised in February, but stocks are short everywhere. Quotations are given as 28c@32c per gallon f. o. b. works.

Dye Bases and Dyewoods

Annatto—The market on seed continues very weak. Offerings as low as 4c per pound are reported in some quarters. The fine is held at 32c@33c per pound with little movement.

Albumen—The market for this material shows no change. Limited trade on Chinese egg is reported at \$1.50 per pound for spot sales with large supplies. The tendency in the technical grade is to shade the price of \$1.15 per pound on resale. Imported blood at 75c per pound and domestic at 55c@60c per pound are active but in limited supply.

Archil—Strong demand and limited supply are holding prices up for this material. The market is nominal, with quotations for double at 20c@25c, triple at 19c@20c and concentrated at 20c@26c per pound.

Brazil Wood—High-grade wood is not offered in quantity. Poorer qualities are quoted at \$40.00@\$60.00 per ton, according to strength, with little activity. Chips are scarce at 6½c@7½c per pound. Extract prices are holding firm on account of the scarcity of wood. Offerings are light, with crystals quoted at 45c per pound and liquid at 10c@15c per pound.

Fustic—Demand is limited on both wood and extracts. Quotations remain about the same—solid at 22c@27c per pound, crystals at 30c@40c, 42-degree extract at 14c@16½c and 51-degree extract at 15c@19c.

Hematine—Prices of this commodity are purely nominal under heavy buying. The 51-degree extract is quoted at 16c@17c and the 100 per cent crystals at 35c@40c per pound.

Logwood—Under heavy buying the market for logwood and extract is nominal. Sticks are quoted at \$50.00 per ton. The solid extract is quoted at 25c per pound and the crystal at 30c. Liquid extract (51-degree T.w.) is quoted at 16c@18c per pound. Spot markets are practically bare.

Osage Orange—Under a growing export demand prices of this material remain strong. 51-degree extract is bringing 9c and solid extract, 19c@20c per pound.

It is reported that the Scottish Dyers, Ltd., Carlisle, England, are to develop an organization in America to be known as the Scottish-American Dye Works. The plant will probably be located in New England, near the large textile industries, and will furnish them with dyes that are needed in fast cottons and woolens. The Scottish Dyers, Ltd., are said to have perfected and manufactured in commercial quantities several so-called "vat" dyes.

The Dress and Waist Manufacturers' Association denies that a marked rise in the cost of dyeing is impending. The new price lists, it says, contain a few increased items and in some cases the periodical rise has been consolidated into one sum, but the general increase will hardly reach 10 per cent. In a good many cases there will be no increase at all.

Dyestuff Notes

The Weidmann Silk Dyeing Co., Paterson, N. J., has purchased the Lehigh Silk Dyeing Co., of Allentown, Pa.

The Sherwin-Williams Co. has moved its department dealing in dyes, chemicals and colors to larger quarters at 115, Broadway, New York.

Dr. George W. Hoover, of Chicago, was re-elected chief referee on drugs by the Association of Official Agricultural Chemists at the convention in Washington.

The National Aniline & Chemical Company, Inc., announces the production of two new basic colors, methyl violet 5 B and fuchsine N B, for dyeing leather, silk and paper; also for cotton and silk printing.

The Chemical Foundation, Inc., 81 Fulton street, New York, has published a pamphlet on "Vat Dye Patents," which is sent to manufacturers and others in the industry at nominal price to cover printing cost.

Sherwin & Williams, who maintain Pacific Coast headquarters at 454 Second street, San Francisco, are having plans prepared for a three-story warehouse and a two-story office building at Emeryville, a unit of the Greater San Francisco.

The Textile Alliance, Inc., has received, under date of Jan. 15, the following cable, which is of interest to dye consumers: "Rhine River at flood stage past two weeks, eliminating river transportation. Water should recede next two weeks and shipments start. Strikes have tied up railroad transportation for the last ten days."

The Textile Alliance, Inc., 45 East Seventeenth street, New York, has announced to the trade that no more allocation certificates for the importation of dyes will be received, the War Trade Board having ceased to issue them on Jan. 5, but the time limit for placing them with the Textile Alliance has been extended to Feb. 15.

The total receipts of aniline dyes at Hongkong during 1919 reached an estimated value of about \$250,000—a fraction of the pre-war trade. The United States supplied about two-thirds of these imports. Gambier and mangrove bark from the East Indies were imported to about the usual value. There was a good trade in myrobalans.

The office of the Union Dye & Chemical Co. has been moved from 81 Fulton street to 80 Fifth avenue, New York. The new office is on the same floor as the offices of the American Aniline Products, Inc., but no statement of the merger of companies has yet been issued. Charles Irving Oliver is in charge of the Union company's office.

A freight discrimination of about twenty-five cents per pound on dyestuffs for Charlotte, N. C., compared with points in Georgia has been removed by the efforts of the Charlotte Shippers and Manufacturers' Association. The discrimination originated with the Central or Georgia, owned by the Illinois Central, which made a rate of sixty-two and one-half cents per hundred pounds on shipments to Georgia. The rates to Charlotte were eighty-nine and one-half cents on liquid dyes and \$1.06½ on dry dyes. The National Aniline and Chemical Co. and E. I. du Pont de Nemours & Co. have warehouses and mixing plants at Charlotte.

The Oil Market

Current Spot Quotations of Oils, Page 136; Tallow, Greases, etc., Page 137

SPOT CHINA WOOD OIL HIGHER

Buyers in the Vegetable Oil Market Not Inclined to Commit Themselves Beyond Immediate Requirements—Peanut Oil Advanced—Domestic Coconut Oil in Tanks Is Lower

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

	Advanced	Palm Oil, Lagos, 3/4c lb.	Palm Oil, Lagos, 3/4c lb.
China Wood, Bbls., 3/4c lb.			
Degras Oil, English, 1c lb.			
Peanut Oil, Refined, 3/4c lb.			
	Declined	Coconut, Dom., Ceylon, Tanks, Soya Bean, Tanks, Pac. Coast, 3/4c lb.	3/4c lb.
	Trend of the Market	Today	Last Week
		Last Month	Last Year
Cod Oil, N. F.	\$1.14	\$1.14	\$1.15
Degras, Amer. bbls.	.0694	.07	.071/2
Lard, No. 1	1.43	1.33	1.35
Menhaden, South, ord*	.85	.85	.95
Neatsfoot, 20 deg. c.t.	2.25	2.25	2.25
Red Oil, Crude	.16	.16	.17
Stearic Acid, T. P.	.30	.30	.30
Coconut, Ceylon, dom., bbls.	.1934	.191/2	.171/2
Cottonseed, crude, tanks*	.191/2	.191/2	.191/2
Linseed cars, bbls.	1.77	1.77	1.72
Olive, denatured	2.50	2.50	2.50
Peanut, refined	.271/2	.27	.27
Soya Bean, bbls.	.1834	.1834	.18
F. O. B. Mills			

Buyers in the vegetable oil market commit themselves only for immediate requirements. Spot China wood oil is higher, being under heavy request. Domestic coconut in tanks is lower. Palm oil is in strong demand. Upward revisions on Lagos and Niger were noted. Peanut oil is higher. Soya bean oil declined sharply on the Coast. Animal oils are strong. The position of the tallow market aids materially in maintaining a firm market on the various oils. Fish oils are quiet and show no tendency to strengthen.

Linseed Oil—The market is dull, but prices have held firm on the basis of \$1.77 per gallon for January-March delivery; \$1.72 for April, and \$1.62 for May-September. Flaxseed has eased off slightly. Argentine seed showed a decline to 8c. At Duluth the seed held steady. January advanced to \$5.08; July declined 15c, and May 12c. Cash Winnipeg declined 20c; May 17c, and July 221/2c.

Cottonseed Oil—Very little buying is reported. Refiners are holding prices firm. Crude, f. o. b. mills in tanks, is 191/2c@20c per pound; summer yellow prime 22c@221/2c; winter yellow nominal at 231/4c@25c per pound.

Coconut Oil—Buyers are practically out of the market, with the general asking price around 19c per pound and selling price at 183/4c on the Coast for Manila in tanks. Domestic Ceylon in barrels on spot is 193/4c@20c per pound, with tanks on the Coast 183/4c. Cochin is held at 201/2c@21c, with tanks nominal at 193/4c@20c per pound.

China Wood Oil—Heavier buying of spot goods has forced prices to higher levels. Barrels on the open market are now 241/4c@241/2c per pound, showing a gain of 3/4c per pound over levels recorded at last report.

Castor Oil—Prices are steady. For No. 1, holders are naming 20c per pound, with cases 21c. No. 3 is 171/2c@19c per pound.

Corn Oil—Consumers are in the market for immediate requirements only. Prices are firm and give no

indication of breaking. Lots are fairly heavy. Refined is quoted at 231/2c per pound.

Olive Oil—The market is quiet, with very light sales. The refined is 231/2c per pound for barrels in car lots. Crude in tanks is held at 19c.

Peanut Oil—Refined was sharply advanced during the week, following increased buying by large consumers. The quotation is 271/2c per pound. Oriental, in sellers' tanks, on the Coast is held at 23c@231/2c per pound on January shipments, and 221/2c on futures. Crude oil at mills is 23c@24c per pound.

Palm Oil—Continuation of heavy buying has forced prices to higher levels, and holders are now asking 171/2c per pound for Lagos. Benin is unchanged at 17c, with Niger higher by a 3/4c at 161/2c as the inside price on quantity lots.

Soya Bean Oil—Buying has eased off considerably, and the market is slightly easier, showing a decline of 3/4c on tanks on the Coast. Shorts appear to be pretty well covered. Spot barrels in New York are unchanged at 181/4c@181/2c per pound.

Animal Oils

Degras Oil—Light demand is reported, with the market holding fairly steady. In quarters, dealers are offering domestic at 63/4c per pound. English is higher, being in light supply at 9c per pound.

Lard Oil—Trading in lard oil is limited, but the strong position of tallow keeps the market firm. Dealers are asking \$1.85 per gallon for the prime winter strained; \$1.75 for off-prime; \$1.55 for extra No. 1; \$1.43 for No. 1, and \$1.38 for No. 2, per gallon.

Red Oil—Buying is light in a steady market, with holders naming from 16c@161/2c per pound.

Neatsfoot Oil—Quotations are firm, with good buying interest reported. Stocks in most quarters are in sufficient supply to meet the demands. \$2.25 is asked for the 20-degree cold test; \$2.05 for the 30-degree; \$1.90 for the 40-degree cold test; \$1.60 for the dark, and \$1.75 for the prime material.

Fish Oils

Cod Oil—Small-lot buying continues, and prices are \$1.12 per gallon for Newfoundland and \$1.10@\$1.12 for domestic material.

Menhaden Oil—Holders of the Southern crude continue to make offerings at 85c per gallon f. o. b. Baltimore. Refined grades are inactive at unchanged levels of \$1.18 for the light strained; \$1.20 for the yellow bleached, and \$1.22 for the winter white bleached.

A brochure on "The Tree, The Olive, The Oil," in Europe and America, has been published by John Hurley, Ph.G., member of the New York State Board of Pharmacy. The history of the tree is traced from the time of its introduction into Greece from Southern Asia to the present day. The uses of olive oil in chemistry and medicine are explained, and the closing chapter is devoted to its ecclesiastical use.

Arthur C. Thompson has formed the firm of A. C. Thompson & Co., with offices at 133 Front street. The new firm will handle Far Eastern and Oriental products exclusively. Mr. Thompson was manager of Rockhill & Vietor, New York City, and of the import department of F. W. Frost & Co., Inc.

NEWFOUNDLAND COD LIVER OIL OUTPUT
(Special Correspondence to DRUG & CHEMICAL MARKETS)

St. John's, Newfoundland, Jan. 16.—The catch of codfish in 1919 was 1,480,000 quintals of 112 pounds each. The livers of the fish caught at the beginning of the season, in June last, were poor but were of better quality in later catches. It is estimated that the oil output was about 1,000,000 gallons. The quantity refined and made into cod liver oil was 370,000 gallons. The average price at St. John's was \$2.00 per gallon.

About 250,000 gallons of the refined oil has been exported, after strict Government inspection. The three inspectors are Patrick Howlett, who formerly owned and operated the Model Factory of Newfoundland, at Petty Harbor; Robert Coyell, formerly a manufacturer of wide experience, and James J. MacFarlane, who has had twenty-two years' experience in handling fish oils for J. and W. Stewart.

The olive crop, for pickling in 1919, in the Province of Seville, Spain, is estimated as 6,432,000 gallons. The fruit is considered to be of fair quality, although there is a small amount of "spotting," especially in the "Queen" variety. The crop of "Queens," or the large green olive, is estimated at 2,572,800 gallons, and the "Máñanilla," the small green olive used entirely for stuffing, at 3,859,200, or 40 per cent and 60 per cent, respectively, of the total crop. The price paid for green olives delivered at the factories for curing averaged \$6.55 per fanega (16 gallons). Shipping conditions are good at present, and enough vessels to insure the transportation of the cured olives are expected. Freight rates for olives from Seville to New York are: Hogsheads, \$13.10; barrels, \$4.68.

The American Safety Razor Corporation, New York, has organized the American Safetee Soap Corporation as a subsidiary organization, incorporated under the laws of Virginia with a capital of \$1,000,000. The new company will engage in the manufacture of soap and other accessories for shaving. Joseph Kaufman is president; George L. Storm, vice-president; Milton Samann, secretary, and J. B. Mesquita, treasurer.

S. D. Gamble, of the manufacturing firm of Procter & Gamble, Cincinnati, arrived at San Francisco, the first of the year from the Orient, having been serving for a year and a half with American troops in China as Y. M. C. A. secretary. He told of the effects of the Chinese boycott against Japanese goods, which he described as being severe. He plans to make an extended stay in California.

The market for vegetable oils at San Francisco is quiet, and prices have eased off slightly. Soya bean oil was offered in sellers' tanks at 15 cents a pound during the first week in January; coconut oil at 17 cents, and peanut oil at 21½ cents. Castor oil was quoted at \$2.25 a gallon for No. 1 and China nut oil at \$25 a case.

Procter and Gamble Co.'s plans for a plant at Dallas, Tex., include seven buildings, deodorizing plants, soap factory and structures for handling finished products. The cost is estimated at \$1,300,000.

E. M. Cramer, Chicago, representative of Peek & Velsor, New York, has been spending several days at the home office.

The Kenedy Cotton Oil Mill Co., of Kenedy, Tex., will rebuild its plant, recently destroyed by fire, with loss of \$75,000.

The Oil Markets

A bill imposing tariff duties on oxalic acid was introduced in the House by Representative Wilson, of Illinois. It imposes five cents a pound on oxalic acid and its salts and 3½ cents a pound on formic acid and its salts, including formate of soda.

The American Business Corporation has acquired the exclusive selling rights to the product of the Frank A. Steele Co., soap manufacturers of Alexandria, Va. The Business corporation has closed contracts with the Semet Solvay Company to supply soda ash and other products needed by the Frank A. Steele Co.

The offices of Marden, Orth & Hastings at Boston were removed on Jan. 12 from 225 Purchase street to 111-113 Lincoln street. This removal marks the passing of one of the old landmarks in Boston. Since 1837 the offices of the firm were at Purchase street, but the necessity for larger quarters was imperative, and the company found it advisable to make the change on the first of the year.

Imports at San Francisco for the first week of 1920 include 819 tons of copra from Vavau to Burns, Philp & Co.; 876 tons of copra from Nukolala to Burns, Philp & Co.; 450 tons of copra from Suva to Wolff Kirschmann & Co.; 450 tons of copra from Vavau to G. W. McNear & Co.; 1,299 tons of copra from Apia for Burns, Philp & Co.; 1,649 bags of copra from Pago Pago, and 605 barrels of coconut oil from Sydney on the steamer Sonoma.

The marine department of the Chamber of Commerce, San Francisco, has compiled figures showing the importations from foreign countries during 1919, by the water route. The list includes the following: Nitre, 29,497 tons and 34,260 sacks; copra, 76,760 tons and 251,942 sacks; olive oil, 2,927 cases; China oil, 10,663 cases; various oils, including soya bean, peanut and coconut, 1,112,389 barrels and 449,612 cases; tin, 191,662 ingots; spices, 35,729 packages; soap, 8,536 boxes, and rubber, 313,296 bales.

Hunter Mann, manager of L. C. Gillespie & Sons' Oil Co., Hankow, China, was a recent visitor in San Francisco, Cal., on his way back to that country after a five months' stay in Virginia, his old home. The company he represents markets about one-half of the wood oil produced in China, much of this passing through San Francisco, on its way to paint and varnish manufacturers. He declares that China offers the best opportunities in the world for a man with energy and a little capital, the Chinese people being very friendly to those who enter that country for the purpose of developing its natural resources, with Americans especially favored.

The exports of peanut oil from Hongkong in 1919 were valued at \$1,500,000. The strong demand from the United States did not begin until the third quarter. Declared exports for nine months reached a value of \$1,281,385, of which only a value of \$208,724 was shipped in the first six months of the year. There was a steady export of wood oil, although the demand was less sustained during the summer than in the opening months of the year. The total exports for the nine months were valued at about \$750,000. Great Britain took the larger portion of the shipments; but the United States was a good customer during the whole period, and Japan also bought considerable of this oil.

The Foreign Markets

Imports of Drugs, Chemicals, Dyestuffs, etc., Page 138

HEAVY OFFERINGS AT DRUG AUCTIONS

London Market Is Higher for Cape Aloes, Antimony, Aspirin, Honey, Ipecac, Lemon Oil, Potassium Permanganate, Sarsaparilla, Shellac and Turpentine—Benzonaphthol, Mace and Nutmegs Are Lower

London, Jan. 20.—There were heavy offerings at the Drug Auction, and the demand for most of the products was fair.

Cape aloes, antimony, aspirin, honey, ipecac, lemon oil, potassium permanganate, sarsaparilla, shellac and turpentine are higher.

There is a firmer tone for cream tartar, gentian and pepper.

Menthol and Japanese mint oil are easier.

Lower prices are quoted for benzonaphthol, mace and nutmegs.

London, Jan. 3 (By Mail).—Stocks of fine chemicals and drugs are by no means plentiful, and, owing to the pre-existing restrictions, importations of late have slowed down considerably. Now that the Government has recalled all the lists of restricted products, parcels of goods near at hand will enter our ports in the same manner as under free trade before the war, except as regards munitions of war. The authorities announce that early in the new session of Parliament legislation will be pressed to secure powers to reimpose the restrictions in force before the late adverse judgment was pronounced. Importers, however, are requested to clearly understand that in the event of the powers being conferred by Parliament, or in the event of the judgment being reversed on appeal, licenses to import restricted goods will not be granted merely on the ground that the goods had been ordered between now and the date of the re-establishment of the restrictions, but will be based solely on consideration of the reasonable requirements of the country. Thus, importers are still in doubt as to the future, since forward shipments appear to be running risks of this threat being carried out at an early date.

The following market changes are the most important:

Aloes, Cape, have been in good demand for the limited supplies available at 75s per cwt, for good, bright firsts. Several lots are now landing and will find a good market.

On sandal wood oil, the agents here for the Mysore Government announce an advance of 5s per lb. to 50s 6d per lb. ex wharf London.

Shellac prices have advanced 15s per cwt. for T.N., spot price being now 710s per cwt.

In Arsenic, Cornish powder is in stronger demand at £66 per ton.

Menthol at 75s, Japanese mint oil at 17s 6d and Japanese refined camphor slabs at 20s 6d per lb. on the spot are a trifle easier.

Copper sulphate is in much better supply than for some time, and the price is more in favor of buyers at £42 per ton.

Caustic potash is scarce and advancing, and the Continental markets are advancing rapidly.

Salicylates are very firm and likely to improve. Salicylic acid is 2s 10d per lb., and sal soda 3s 9d per lb.

Sugar of milk is firm at 220s per cwt. for Dutch.

Agar agar is quieter. No. 1 strip Kobe is 3s 3½d per lb.

Lemon oil is easier at 6s 6d per lb.

In carbolic acid, a good deal of business has been passing, and several round lots have been bought for export at 10d to 10½d per lb.

IMPORTS OF GERMAN DYES AND CHEMICALS

(*Special to DRUG AND CHEMICAL MARKETS*)

Washington, Jan. 20.—For the eleven months ended November, 141,453 pounds of coal-tar dyes and colors (anthracene and carbazole derivatives), invoiced at \$82,643, were received from Germany, according to the Department of Commerce. A steadily increasing volume of trade between Germany and the United States, with American exports to the enemy country reaching in November of 1919 almost 50 per cent of what they were in the same month of 1913, is shown in the report just published.

Imports from Germany were valued at \$291,166 in July, 1919, and by November the volume had grown to a value of \$3,228,919. The imports in November, 1913, were valued at \$14,256,993. August exports to Germany were valued at \$11,674,257 in 1919, or 55 per cent of the corresponding amount, \$21,301,274, in 1913. Concerning the increase in trade the report of the department says:

"For the eleven months ending November, 1919, imports from Germany amounted to \$8,143,706, or 5 per cent of the corresponding value in 1913 of \$165,939,267. Exports for the same period in 1919 were invoiced at \$75,464,237, or nearly 24 per cent of the value in 1913, which amounted to \$318,720,256. During the pre-war period the exports were not quite double the imports, but in 1919 they were more than nine times as great.

"Taking into consideration the difference between present and pre-war values, recent imports from Germany seem insignificant as compared with the pre-war trade. In view, however, of Germany's exhausted condition since the war, the urgent need of foodstuffs and the depreciated value of the mark, credit is due for notable gain shown in the import figures from month to month. The growth seems to indicate that a continuous effort is being made to re-establish this foreign trade. Imports from Germany in September, in spite of the need of raw materials for German industries, reached a total of \$1,586,963.

"November imports show a greater variety of manufactured goods than those of any previous month since the armistice. Fertilizers received in that month were valued at \$562,717; chemicals, valued at \$174,013, consisted of \$51,644 worth entered duty free, \$66,341 worth of coal-tar dyes and colors (astrachan and carbazole derivatives) and \$56,028 worth of other dutiable chemicals."

The London tin market was reported strong, and local imports were firm at from 63¾c to 64c for spot and 64c to 64½c for shipment from London and the Far East. Considerable business was closed out at 63¾c, and there was quite a large inquiry. The buyers were mostly plate manufacturers, but metal dealers and other consumers were also in evidence.

DUTCH BARK AND QUININE SALES

The Amsterdam market for cinchona bark was very firm when 590 cases of pharmaceutical bark consisting of 186 cases of pieces and powder, 297 cases of cuttings and 107 cases of root bark, Succirubra, were offered at the November auction. The whole weighed 33,858 kilos, with 882 kilos quinine sulphate. All of this was sold, the prices being 34½ to 114 cents [Dutch cent = 0.4 American cent] for pieces and powder; 81 to 101½ cents for cuttings, and 44 to 164 cents per one-half kilo for the root bark, Succirubra. The quality of the goods was excellent.

About 76½ florins per kilo was quoted for quinine sulphate for local consumption. For 25 kilos or more the price is 1 florin per kilo lower, with a discount of 3 per cent. Annual exports of quinine from Java from 1907 to 1919, and monthly exports in 1919 were as follows:

Annual Exports from 1907 to 1918

	Kilos		Kilos
1907	12,578	1913	70,957
1908	29,863	1914	61,113
1909	36,087	1915	92,053
1910	118,752	1916	114,573
1911	100,601	1917	133,508
1912	78,658	1918	250,704

Monthly Exports from January to July, 1919

	Kilos		Kilos
January	13,012	May	33,857
February	28,902	June	115,562
March	20,972	July	119,127
April	34,508		

Exports of cinchona bark and quinine from Java and Madoera by private persons were as follows:

January to June

1918 1919

Cinchona Bark	Kilos	Kilos
Great Britain	524,000	1,405,000
United States	682,000	1,066,000
Singapore	78,000	.....
Japan	31,000	222,000
Elsewhere .....	.....	268,000

Total 1,315,000 2,961,000

January to June

1918 1919

Quinine	Kilos	Kilos
Netherlands .....	.....	66,835
Great Britain	30,198	87,503
Other Europe	2,000	6,199
United States	17,983	30,081
British India	34,675	36,197
Singapore	21,998	2,844
China	8,171	4,779
Japan	18,107	7,657
Philippines	1,658	7,007
Australia	2,603	9,393
Elsewhere	5,814	6,754

Total 143,207 265,249

DUTCH SALES OF SPICES

First-hand sales of spices at Amsterdam and Rotterdam, Holland, for the period from Jan. 1 to Oct. 31, 1919, were as follows:

Nutmeg Mace

Kilos Kilos

Kotterdam	59,500	10,800
Amsterdam	26,000	2,100

BRITISH TRADE IN CHEMICALS IN 1919

Business of the Year Satisfactory in Spite of Many Handicaps—Prices Considerably Lower on Leading Products—Demand for Benzol—Value of Exports of Chemicals, Drugs, Dyes and Colors

(Special Correspondence to DRUG & CHEMICAL MARKETS)

London, Jan. 17.—The condition of the market on heavy chemicals, coal-tar products and alkalies is outlined by Sir S. W. Royse & Co., Ltd., as follows: "Trade in heavy chemicals in 1919 has been satisfactory and especially so during the later months, though handicapped by difficulties brought about by the war. A year ago there were still a good number of restrictions on commerce, but these, with some few exceptions, have gradually been removed. Labor unrest has been a marked feature of the year, caused no doubt to a large extent by the continual rise in the cost of living, and the frequent strikes and threatened strikes have much interfered with production."

"Prices of many products have fallen considerably from the figures quoted at the beginning of the year, and the lower level of values has given more confidence to consumers and materially contributed to the good business which has been passing. During the last few months the values of many products have again risen, and manufacturers are disinclined to sell far forward."

"The demand for coal-tar products has been only a moderate one, but there has been more activity during the last few months and some good business has been placed for forward delivery. The recent strikes have much interfered with manufacture and delivery. Refined benzols have continued firm and the production has been readily absorbed, especially for motor purposes. The National Benzol Association has been formed during the course of the year for the purpose of regulating and distributing supplies for the motor trade. Crude benzol has been in good demand and parcels have been taken up readily at full prices. Some heavy sales have been made over 1920 at increased figures. Toluoles have continued steady and latterly have been slightly firmer. During the earlier part of the year solvent naphtha was somewhat depressed. In sulphate of ammonia the home market has been taking the bulk of the production and exports have increased, the returns showing 79,972 tons, value £1,937,052 for the eleven months ending November as against 17,873 tons, value £457,131 for the same period of 1918."

"Bleaching powder was selling at about £14 10s to £15 per ton until September, when the price was raised to £17 per ton for early delivery. Caustic soda was offering freely in the earlier part of the year, and the price of 70 per cent white eased from about £30 per ton in January to about £18 per ton in July. During the later months, prices have advanced considerably chiefly through an active export demand. Ammonia alkali has been in steady request during the year and the same may be said of soda crystals and bicarbonate of soda. In the eleven completed months the exports of bleaching powder were 16,141 tons as against 2,261 tons and 2,582 tons for the corresponding periods of 1918 and 1917 respectively. In the exports of soda compounds the figures vary only slightly for the same periods. Chlorates of potash and soda have been in plentiful supply and are lower, potash having fallen from about 2s 3d per lb. to about 1s per lb. and soda from about 1s 1d per lb. to 6d per lb."

"Of chemicals, drugs, dyes and colors, the value of the exports from Jan. 1 to Nov. 30 were in 1917 £21,718,667, in 1918 £20,747,782 and in 1919 £26,259,718. The value of the imports for the same period were in 1917 £24,845,081, in 1918 £36,107,922 and in 1919 £20,616,267."

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils.

NOTICE—Prices quoted are spot New York, unless otherwise indicated, for goods in large quantities in original packages. A price range (two sets of figures, 16-19) indicates prices for different quantities or that different manufacturers or importers quote different prices, all of which are included within the range.

All quotations are on the basis of avoirdupois pounds and ounces and American gallons. For the ready reference of exporters and foreign buyers, the following tables of equivalents are published:

WEIGHTS AND MEASURES

1 Imperial Gallon (Brit.)	-1.20	Amer. Gallons
1 American Gallon	-833	Imperial Gallon
1 American Gallon	-3.75	liters
1 Liter	-264	American Gallon
1 American Gallon (H ₂ O) weighs 8.35 pounds		
1 Pound (Avoirdupois) weighs .454 kilogram		
1 Kilogram weighs 2.26 pounds (Avoirdupois)		

FOREIGN EXCHANGE

	Par Current
Great Britain (pound sterling)	\$4.866 \$3.68
France (franc)	.193 .116
Italy (lira)	.188 .134
Germany (mark)	.238 .017
Japan (yen)	.459 .495
Spain (peseta)	.183 .190
Holland (guilder)	.402 .375
Belgium (franc)	.193 .116
Switzerland (franc)	.193 .056
Norway (crown)	.268 .193
Sweden (crown)	.268 .207
Denmark (crown)	.268 .179
Argentina (peso)	.424 .431
Brazil (milreis)	.270 .280
China (Silver dollar—Hongkong)	.758 .950
(Taels—Shanghai, silver)	1.883 1.685
(Taels—Peking, silver)	1.156 1.725
Russia (ruble)	.515 .040

Fine Chemicals

Acetanilid, C.P., bbls., blk. lb.	.55 — .60
Acetone	.194 — .15
Acetophenetidin	.165 — .275
Aconitine, Sulph., 36-oz. vials	— —
Adeps Lanac, hydros. See Lanolin	
Anhydrous, See Lanolin	
Alcohol 190 proof U.S.P... gal.	— — 5.25
Cologne Spirit, 190 proof gal.	— — 5.50
Wood, ref. 96 p.c. gal.	1.56 — 1.60
97 p.c. gal.	1.59 — 1.68
Pure	2.05 — 2.10
Denatured, 180 proof	.77 — .79
188 proof	.79 — .81
Aldehyde	.125 — 1.45
Aloin U.S.P., powd.	.90 — .95
Ammonium, Acetate, cryst. lb.	.65 — .70
Benzoate, cryst. U.S.P. lb.	— — 4.00
Bichromate, C. P.	.95 — 1.00
Bromide, gran., bulk.	.80 — .85
Carb. Dose U.S.P., powd. lb.	.12 — .125
Chloride U.S.P. lb.	.24 — .25
Iodide	.45 — .46
Oxalate, Pure	.45 — .45
Oxinate, Pure	.55 — 1.05
Perchlorate	.55 — .60
Phosphate (Diphosphate)	.55 — .60
Salicylate, U.S.P. lb.	.55 — 1.00
Amyl Acetate, bulk, drums gal.	.665 — .775
Antimony Chlor. (Sol. butter of Antimony)	.18 — .20
Needle powder	.11 — .12
Sulphate, 16-17 per cent free sulphur	.35 — .34
Antipyrine, bulk	6.50 — 6.60
Apomorphine Hydrochloride, oz.	— — 26.00
Argols	.10 — .11
Arsenic, red. See Heavy Chemicals	
White, See Heavy Chemicals.	
Arsenous Iodide, U.S.P....lb.	— — 4.85
Aspirin	.95 — 1.00
Atropine, Alk. U.S.P., 1-oz. v. oz.	— — 30.00
Sulphate, U.S.P., 1-oz.v. oz.	— — 14.00
Barbital	— — 2.25

Barium Carb. prec., pure....lb.	.28 — .29
Chlorate, pure	.28 — .29
Iodide	— — 5.15
Bay Rum, Porto Rico.....gal.	3.20 — 3.25
St. Thomas	3.20 — 3.25
Benzaldehyde (see bitter oil of almonds)	
Benzonaphthol	4.25 — 4.50
Berberine Hdcchl.	— — 34.00
Acid Sulphate, lb.	— — 31.00
Neutral Sulph.	— — 35.00
Bismuth Ammon. Cltr, U.S.P. ....lb.	— — 5.70
Citrate, U.S.P.	— — 3.00
Oxychloride	— — 3.20
Salicylate	— — 2.45
Subbenzoate	— — 3.75
Subcarbonate, U.S.P. ....lb.	— — 3.00
For X-ray Diagnosis	— — 3.50
Subgalate	— — 2.75
Subiodide	— — 5.15
Subnitrate	— — 2.75
Subsaliycilate	— — 2.90
Tannate	— — 2.80
Metallic	— — 2.72
Borax, in bbls., crystals	.082 — .09
Crystals, U.S.P., Kegs. ....lb.	.084 — .095
Bromides, See Potass. Brom. etc.	
Bromine, tech. bulk	.55 — .65
Cadmium Bromide, crystals	1.75 — 1.80
Iodide	— — 4.80
Metal sticks	1.40 — 1.45
Hydrobromide	— — 7.00
Citrated, U.S.P. ....lb.	6.00 — 6.25
Phosphate	10.08 — 11.00
Sulphate	9.25 — 9.50
Calcium Glycerophosphate	1.70 — 1.75
Iodide	— — 4.00
Phosphate, Precip.	.21 — .23
Sulphocarbonate	.85 — .90
Camphor, Am. ref'd bbls. ....lb.	— — 3.30
16's in 1-lb. carton	— — 3.40
24's in 1-lb. carton	— — 3.40
32's in 1-lb. carton	— — 3.40
Japan refined, 2½ lb. slabs	— — 3.30
Monobrominated, bulk	— — 5.85
Caramel	1.05 — 1.20
Casein, C.P.	— — .40
Technical	— — .15
Castor Oil, AA bbls.	— — .20
Cerium Oxalate	.74 — .78
Chalk, Precip.	.055 — .06
Drop	— — .03 — .03%
Chloride Hydrate, U.S.P. crystals, drums incl'd 100lb. lots	— — .95
Chloroform, drums, U.S.P. ....lb.	— — .30
Chrysarobin, U.S.P. ....lb.	— — 4.00
Cinchonidin, Alk. crystals	— — 1.26
Cinchonine, Alk., crystals	— — .74
Sulphate	— — .45
Cocaine, Hydrochl. Cryst.	— — 10.50
Gran. Powd.	— — 10.75
Cocoa Butter, bulk	.875 — .40
Cases, fingers	.45 — .46
Codeine, Alk. 25 oz. lots	— — 11.40
Hydrobromide	— — 9.10
Nitrate	— — 10.30
Phosphate	— — 8.66
Sulphate	— — 9.10
Cod Liver Oil, Newf'd....bbls.	90.00 — 92.00
Norwegian	bbl. 100.00 — 102.00
Collodium, U.S.P. ....lb.	.30 — .31
Corrosive Sublimated, see Mercury	
Coumarin, refined, see Aromatic Chemicals	
Cream of Tartar, cryst. U.S.P. ....lb.	.55 — .46
Powdered, 90 p.c. ....lb.	.55 — .46
Cresotic, U.S.P. ....lb.	1.00 — 1.05
Carbonate	4.00 — 4.25
Cresol, U.S.P. ....lb.	.154 — .16
Dionin, See Morph. Ethyl Hydrochl.	
Dover's Powder, U.S.P. ....lb.	2.80 — 3.00
Emetine, Alk. 15 gr. vials	— — 2.00
Hydrochloride, U.S.P. ....lb.	— — 27.00
15 gr. vials	— — 1.26
Epsom Salts, see Mag. Sulphate	
Ether, U.S.P., Conc. ....lb.	— — .19
Washed	— — .36
Nitrous, cone	1.10 — 1.11
U.S.P., 1880	— — .34
Anaesthesia	— — .23
Eucalyptol, U.S.P., See Aromatic Chemicals	
Formaldehyde	.48 — .50
Gelatin, silver	— — 1.25
Glycerin, C.P.	1.20 — 1.25
Drums and bbls. added	.24% — .25
C. P. in cans	— — .27
Dynamite drums included	.24 — .24%
*Nominal	
Glycerin Sapon., loose	lb. .18 — .18%
Soap Lye, loose	lb. .17 — .17%
Guaiacol, liquid	lb. — — 6.50
Carbonate	lb. — — 6.50
Haarlein Oil, dom.	gross — — 3.50
Imported	gross — — 5.50
*Hexamethylenetetramine	lb. 1.65 — 1.70
Hydroquinone, Alk.	oz. — — 26.50
Hydrochloride	oz. — — 26.50
Sulphate	oz. — — 26.50
Hydroquinone, bulk	lb. 2.00 — 2.05
Iodides, See Potass. Iodide, etc.	
Iodine, Resublimed	lb. — — 4.10
Iodoform, Powdered, bulk	lb. — — 4.85
Crystals	lb. — — 5.35
Iron Citrate, U.S.P., VIII. ....lb.	— — 1.22
and Ammon. Citrate, U.S.P. ....lb.	— — 1.07
Green scales, U.S.P. ....lb.	— — 1.33
Iodide	— — 3.90
Syrup, U.S.P. 1900	lb. — — .30
Phosphate, U.S.P.	— — 1.04
Pyrophosphate, U.S.P.	— — 1.49
Metallic, Reduced	— — .50
Lanolin, hydr. cane U.S.P. ....lb.	.17 — .20
Anhydrous, cane	lb. .24 — .25
Lead Iodide, U.S.P. VIII. ....lb.	— — 3.05
Licorice, U.S.P. Mass.	lb. .54 — .55
Powdered	lb. .50 — .55
Sticks	lb. — — 2.50
Lithium Carbonate	lb. — — 1.50
Citrate	lb. — — 2.50
Lycopodium, U.S.P.	lb. — — 2.25
Magnesium Carb. U.S.P. ....lb.	.20 — .21
Technical, bbls.	lb. .11 — .13%
Glycerophosphate	lb. — — 4.55
Hyphophosphate	lb. 1.65 — 1.70
Oxide, tins light	lb. — — 1.18
Peroxide, cans	lb. — — 2.15
Salicylate	lb. .60 — .65
Sulphate, Epsom Salt, tech.	
100-lbs. U.S.P. 100-lbs. U.S.P.	2.00 — 2.10
Manganese Glycerophos.	lb. 3.25 — 3.35
Hypophosphate, U.S.P. VIII. ....lb.	2.00 — 2.10
Iodide	— — 4.65
Peroxide	lb. .75 — .80
Sulphate, crystals	lb. — — .55
Menthol, Japanese	lb. 13.75 — 14.00
Mercury, flasks, 75 lb.	ea. — — 93.00
Blauphant	lb. — — 1.26
Blue Mass	lb. — — .81
Powdered	lb. — — .83
Blue Ointment, 30 p.c.	lb. — — .79
50 p.c.	lb. — — 1.10
Citrine Ointment	lb. — — .59
Calomel, Amer.	lb. — — 1.68
Corrosive Sublimate cryst.	lb. — — 1.56
Powdered, Granular	lb. — — 1.51
Iodide, Green	lb. — — 2.81
Red	lb. — — 2.81
Yellow	lb. — — 2.81
Red Precipitate	lb. — — 1.55
Powdered	lb. — — 1.95
White Precipitate	lb. — — 1.97
Powdered	lb. — — 2.02
with chalk	lb. — — .82
Methyl salicylate, see Aromatic Chemicals	
Methylene Blue, medicinal	lb. — — 12.00
Milk, powdered	lb. — — .25
Mineral Oil, white	gal. 1.00 — 2.00
Morphine, Acet. 25-oz.	oz. — — 2.50
Hydrobromide	oz. — — 5.50
Hydrochloride	oz. — — 5.50
Sulphate	oz. — — 5.50
Diacetyl, Alkaloid 10-oz.	oz. — — 13.30
Diacetyl, Hydrol.	oz. — — 11.85
Ethyl Hydrol.	oz. — — 13.45
Opium, cases, U.S.P.	lb. — — 6.75
Granular	lb. — — 8.50
Powdered, U.S.P.	lb. — — 8.50
Oxgall, pure U.S.P.	lb. 1.50 — 1.55
Papain	lb. 3.50 — 4.00
Paraffin White Oil, U.S.P. ....gal.	3.10 — 3.60
Paraformaldehyde	lb. — — .95
Paris Green, kegs	lb. .30 — .31
Pepsin, Powd., U.S.P.	lb. 3.00 — 3.50
*Nominal	

CHARLES COOPER & CO.

Established 1857

194 Worth Street
NEW YORK

WORKS AT NEWARK, N. J.

A FULL LINE OF TECHNICAL, PHOTOGRAPHIC AND MEDICINAL CHEMICALS

Manufacturing Chemists

A partial list of our products are:

AMMONIA ANHYDROUS
CHEMICALLY PURE ACIDS AND AMMONIA
COLLODION AND LACQUERS
ETHER SULPHURIC FOR ANAESTHESIA
ETHYL CHLORIDE
NITRATE SILVER
SOLUBLE COTTON AND ITS SOLVENTS
SULPHITE SODA
SULPHUR FLOUR

Pharmaceutical

Chemicals and Specialties

We solicit your inquiries for the following and other products
 Acid Cacodylic (Crystals)
 Amidopyrine (Crystals)
 Antipyrine (Crystals)
 Antipyrine Salicylate
 Creosote Carbonate
 Creosote Medicinal
 Guaiacol Carbonate
 Guaiacol (Liquid)
 Iron Cacodylate
 Mercury Cacodylate
 Potassium Guaiacol Sulphonate
 Sodium Cacodylate
 Sodium Methylarsinate

Write for our price list

E. FOUGERA & CO., Inc.
Established 1849

90-92 Beckman St., New York, N.Y.



R.W. GREEFF & CO.

Incorporated

78 Front Street

Cor. Old Slip — NEW YORK CITY

Exporters

and

Importers

Manufacturers' Agents

Technical and Pharmaceutical Chemicals

Dye Intermediates and Dyestuffs
 Crude Drugs and Essential Oils
 Medicinal Preparations

Cable Address: Fergcotrav, Newyork. All Codes used

Europaea Correspondents: R. W. GREEFF & CO.
London and Manchester, England

Acetanilide U.S.P.
 Bismuth Subnitrate and
 other Bismuth Salts
 Codeine and its Salts
 Diacetyl-Morphine
 Iodoform

The New York Quinine and Chemical Works, Inc.

Manufacturers of
 STANDARD MEDICINAL CHEMICALS

135 William St., New York



Morphine and its Salts
 Potassium Iodide
 Quinine and its Salts
 Strychnine and its Salts
 Thymol Iodide

Fine Chemicals, Acids, and Crude Drugs

Petrolatum, light amber bbls. lb.	.07½ - .08		Sulphonethylmethane, U.S.P. lb.	16.00	-16.75	Agaric, white powd. lb.	—	4.50
Cream White	lb. .09	-.06½	Sulphonmethane, U.S.P. lb.	12.00	-14.00	Almonds, bitter	lb. .35	— .40
Lily White	lb. .15	— .16	Sulphur, roll, bbls. 100 lbs.	3.20	— 2.50	Sweet	lb. .40	— .45
Snow White	lb. .18	— .20	Flour, 100 p.c. pure. 100 lbs.	3.35	— 2.75	Meal	lb. .45	— .50
Phenolphthalein	lb. 1.60	— 1.75	Flowers, 100 p.c. pure. 100 lbs.	3.55	— 2.95	Ambergris, black	oz. lb.	— 10.00
Phosphorus, yellow	lb. —	— .35	Precip., U.S.P. lb.	—	— .17	Grey	lb.	— 23.00
Red	lb. .68	— .70	Lac Sulphur	lb. .09	— .10	Areca Nuts	lb.	—
Pilocarpine	oz. —	— 10.00	fartar Emetic, tech. lb.	.67	— .67½	Powdered	lb.	.25 — .26
Podophyllin	lb. —	— 9.50	Terpin Hydrate	lb. .73	— .73½	Balm of Gilead Buds	lb. .150	— 2.00
Potassium acetate	lb. .75	— .89	Theobromine Alkaloid	lb. —	— 10.50	Burgundy Pitch, Dom.	lb. .08	— .09
Bicarbonate, U.S.P.	lb. .28	— .30	Thymol, crystals, U.S.P. lb.	12.00	— 12.25	Cantharides, Chinese	lb. 1.40	— 1.45
Bisulphite	lb. .45	— .60	Iodide, U.S.P., bulk. lb.	—	— 11.50	Powdered	lb.	—
C. P.	lb. .75	— .85	tin, bichloride, see Heavy Chemicals	—	—	Russian, whole	lb.	— 3.75
Bromide Crystals, bulk.	lb. .90	— .91	Oxide, 500 lb. bbls. lb.	—	— .60	Powdered	lb.	— 3.95
Granulated	lb. .85	— .86	Toluol. See Coal Tar Crudes.	—	—	Charcoal Willow, powdered	lb. .03½	— .07
Chlorate	lb. .15	— .16	Trional	oz. 1.06	— 1.10	Wood, powdered	lb. .04	— .05
Chrome, cryst. yellow,	—	—	Turpentine, Venice, True. lb.	3.00	— 3.25	Civet	oz. 2.50	— 2.75
tech. 1-lb. c. b. 10.	lb. —	— .75	Artificial	lb. .14	— .15	Zolocynth, Apples, Trieste. lb.	.30	— .35
Citrate, bulk, U.S.P.	lb. —	— 1.76	Spirits, see Naval Stores.	—	—	Pulp, U.S.P. lb.	.35	— .36
Glycerophosphate, 75%	oz. 1.75	— 1.80	Vanillin, see Aromatic Chemicals	—	—	Spanish Apples	lb. .45	— .55
Hypophosphite, bulk.	oz. 1.05	— 2.00	Witch Hazel, Ext., dbl dist.	—	—	Cuttlefish Bones, Trieste. lb.	.58	— .60
Iodide, bulk	lb. 3.25	— 3.35	bbl. gal. 1.18	— 1.20	Jewelers, large	lb. 1.70	— 1.75	
Lactophosphate	oz. —	— 1.90	Zinc Carbonate	lb. —	— .16	Small	lb. 1.35	— 1.60
Permanganate, U.S.P.	lb. .70	— .75	Iodide, bulk	lb. .45	— .50	French	lb. .35	— .60
Salicylate	lb. 1.60	— 1.65	Metallic, C. P.	lb. .45	— .75	Dragon's Blood, Mass.	lb. .35	— .40
sulphate, C.P.	lb. 1.11	— 1.16	Oxide, U.S.P., bbls. lb.	.22	— .23	Reeds	lb. 2.00	— 2.50
Tartrate, powdered	lb. —	— 1.25	Stearate	lb. .38	— .42	Ergot, Russian	lb. 5.00	— 5.25
cocaine, oz. bottles.	7.00	— 7.50			Spanish	lb. 5.00	— 5.25	
5 gr. bottles	—	—			Grains of Paradise	lb. —	— .35	
quicksilver, See Mercury	—	—			Guarana	lb. —	— 1.10	
Quinine Sulf., 100-oz. tins. oz.	—	— .90			Honey, Calif.	lb. —	— .23	
1-oz. tins	oz. —	— .98			Hops, N. Y., prime	lb. .83	— .87	
Second Hands, Java	oz. —	— .90			Pacific Coast, prime	lb. .85	— .89	
Second Hands, Amer.	oz. —	—			Isinglass, American (see Agar Agar)	lb. —	—	
Bisulphite, 100-oz. tins. oz.	—	— .90			Russian	lb. —	— 10.00	
Alkaloid	oz. —	— 1.29			Kamala	lb. —	— 4.00	
Acetate	oz. —	— 1.29			Kola Nuts, West Indies	lb. —	— .18	
Benzote	oz. —	— 1.29			Leeches	lb. —	— 8.00	
Citrate	oz. —	— 1.29			Lupulin	lb. 2.40	— 2.50	
Dihydchloride	oz. —	— 1.29			Manna, large flake	lb. .75	— .80	
Hydrochloride	oz. —	— 1.19			Small flake	lb. .58	— .60	
Hypophosphite	oz. —	— 1.29			Moss, Iceland	lb. .17	— .18	
Phosphate	oz. —	— 1.19			Irish	lb. .11	— .14	
Salicylate	oz. —	— 1.19			Musk, pods, Cab.	oz. 15.00	— 16.00	
Tannate	oz. —	— .90			Tonquin	oz. 25.00	— 26.00	
Quinidine Alk. crystals, tins. oz.	—	— 1.26			Grain, Cab.	oz. 23.00	— 25.00	
Sulphate, tins. oz.	—	— .55			Tonquin	oz. 45.00	— 50.00	
Resorcin crystals, U. S. P. lb.	6.00	— 6.25			*Synthetic	oz. —	— 30.00	
Rochelle Salt, crystals, bxs. lb.	—	— .39			Nux Vomica, whole	lb. .08	— .09	
Powdered, bbls. lb.	—	— .39			Powdered	lb. .13½ — 14½	—	
Rosewater, triple	lb. —	— 10.00			Poppy Heads	lb. —	— 1.25	
Saccharin, U.S.P., soluble	lb. 3.00	— 3.25			Sandalwood	lb. .48	— .50	
U.S.P., Insoluble	lb. 3.00	— 3.25			Ground	lb. .55	— .60	
Salicin, bulk	lb. —	— 30.00			Camomony, resin	lb. 2.95	— 3.20	
Salol, U.S.P., bulk.	lb. .90	— .95			Powdered	lb. 3.05	— 3.30	
Santonin, cryst., U.S.P. lb.	—	— 100.00			Spermaceti, blocks	lb. .29	— .30	
Powdered	lb. —	— 100.00			Storax, liquid cases	lb. 1.50	— 1.60	
Seiditz Mixture, bbls. lb.	—	— .30½			Tamarins, bbls. Kegs	lb. 11½ — 12½ per keg	— 6.25	
Silver nitrate, 500 oz. lots. oz.	—	— .82						
Soap, Castile, white pure. lb.	.26	— .28						
Powd., U.S.P., bbls. lb.	.39	— .40						
Green, U.S.P. lb.	.17	— .18						
Sodium, Acetate, U.S.P., gran. lb.	25	— 29						
Benzote, gran., U.S.P. lb.	.75	— .77						
Bicarb. U.S.P., powd., bbls. lb.	.024	— .02½						
Bromide, U.S.P., bulk. lb.	.75	— .76						
Cacodylate	oz. —	— 1.40						
Chlorate, U.S.P. lb.	—	— 1.14						
Crystals, c. b. 10. lb.	.12	— .14						
Granular, c. b. 10. lb.	—	— .15						
Citrate, U.S.P. Cryst. VIII. lb.	—	— 1.09						
Granular, c. b. gran. IX. lb.	—	— 1.24						
Cyanide 96-98, see Heavy Chemicals	—	—						
Glycerophosphate, crystals. lb.	2.15	— 2.20						
Hypophosphite, U.S.P. lb.	1.00	— 1.05						
Iodide, bulk	lb. —	— 3.65						
Peroxide	lb. —	— .35						
Phosphate, U.S.P., gran. lb.	—	— .13						
Recryst. lb.	.17	— .18						
Dried	lb. —	— 45						
Salicylate, U.S.P. lb.	—	— .60						
Sulph. (Glauber's Salt) lb.	.01½ — .01½	—						
Strontium Brom. Cryst. blk. lb.	.75	— .76						
Carbonate, pure	lb. —	— .45						
Iodide, bulk	lb. —	— 3.60						
Nitrate	lb. —	— .25						
Salicylate, U.S.P. lb.	—	— .65						
strychnine Alkd., cryst. oz.	—	— 1.80						
Acetate	oz. —	— 1.80						
Hypophosphite	oz. —	— 2.00						
Hydrochloride	oz. —	— 1.80						
Nitrate	oz. —	— 1.80						
Sulphate, crystals, bulk. oz.	—	— 1.40						
Sugar of Milk, Powder. lb.	.28	— .30						
Cartons, 1 lb. lb.	—	— .35						
Salphonal, 100-oz. lots. lb.	.85	— .90						

*Nominal

Crude Drugs

MISCELLANEOUS

Agar, Agar, No. 1. lb.	.85	— .86
No. 2. lb.	—	— .80
No. 3. lb.	—	— .75

*Nominal

Angostura	lb. .28	— .30
Hawthorn Bark, pressed	lb. .17	— .21
Barberry	lb. —	— 1.00
Bayberry	lb. .50	— .60
Blackhawk, of root. of Tree	lb. .60	— .65
Buckthorn	lb. .35	— .40
“Ataya”	lb. .80	— 1.00
Cascara Sagrada	lb. .95	— 1.00
Cascarilla, quills. Siftings	lb. .15	— .18
Chestnut	lb. .10	— 1.04
Cinchona, red quills.	lb. .85	— 1.00
Broken “Yellow “quills”	lb. .60	— .85
“Broken”	lb. —	—
“Loxa, pale, bs.”	lb. —	—
“Powdered, boxes”	lb. —	—
“Maracaibo, yellow, powd.”	lb. —	—
Condurango	lb. .11	— .12
Cotton Root	lb. .25	— .40
Cramb (true)	lb. .50	— .55
Cramb (so-called)	lb. .09	— .10
Dogwood, Jamaica	lb. —	— 1.0

Chemical Works Modoery

Ltd.

ESTABLISHED 1902

Basle, Switzerland

**Diethylbarbituric Acid
Diacetyl tannin
Methylenditannin
Oleoresin Aspidium
Silver Colloidale
Silver Nucleinate
Silver Proteinate
Sulfothyol
Valerates**

*Write for Quotations***New York Office, 165 Broadway****Pharma-Chemical Corporation****MANUFACTURING CHEMISTS***Offer***Creosote Carbonate U.S.P.****Sulphonal U.S.P.****Trional U.S.P.****Salophen****WORKS AND LABORATORIES, BAYONNE, N. J.****General Offices****1564 to 1570 Woolworth Building**

Telephone, Barclay 1634-1635

**RHODIA
CHEMICAL COMPANY****135 Cedar Street, New York City****Monomethyl P-amidophenol Sulphate
(Our Mark RHODOL)**

**Acetate Cellulose
Antipyrine
Amidopyrazoline
Dimethylsulphate
Piperazine Hydrate
Saccharin
Hydroquinone**

Prompt Deliveries

Telephone Rector 6129

SALICYLIC ACID**U.S.P. * Sublimed**

**PHENOL, U.S.P.
ASPIRIN, N. & N.F.**

**ATROPINE SULPHATE
EMETINE HYDROCHLORIDE
YOHIMBIN HYDROCHLORIDE**

Midland Trading Corp.**90 West Street, New York**

**Manufacturers' Agents
Importers Exporters**

Cable Midtrace—Phones Rector 2857-8

Crude Drugs: Roots, Gums, Herbs, Flowers—Shellac

	GUMS	MOTHERWORT HERB
Eim, grinding	lb. .30 — .40	Aloes, Barbados lb. — — 1.00
Select bds.	lb. .65 — .70	Cape lb. .13 — .14
Hemlock	lb. .07 — .08	Curacao, cases lb. .59 — .59½
Lemon Peel	lb. .10 — .10½	Socotrine, whole lb. .75 — .80
Mezereon	lb. .25 — .28	Powdered lb. .90
Oak, red	lb. .08 — .09	Ammoniac, tears lb. — —
White	lb. .08 — .09	Powdered lb. — —
Orange Peel, bitter	lb. .09 — .10	Arabic, firsts lb. .30 — .40
Malaga, Sweet	lb. .12 — .13	"Secondes lb. .30
Trieate, sweet	lb. .10 — .12	Sorts Amber lb. .15½ — .16
Prickly Ash, Southern	lb. .23 — .25	Powdered lb. .27 — .30
Northern	lb. .23 — .25	Asafoetida, whole, U.S.P. lb. .350 — .360
Pomegranate of Root, of Fruit	lb. .26 — .28	Powdered lb. .475 — .500
Sassafras, ordinary	lb. .40 — .45	Benzoin, Siam lb. .50 — .50
Select	lb. .50 — .55	Sumatra lb. .33 — .36
Simaruba	lb. .50 — .55	Camphor, ref., See fine chem. list
Soap, whole	lb. .13½ — .15	Catechu lb. .11 — .15
Cut	lb. .53 — .54	Chile, Mexican lb. .100 — .105
Crushed	lb. .21	Euphorbium lb. .28 — .30
Wahoo, of Root, of Tree	lb. .85 — .90	Powdered lb. .50
Willow, Black	lb. .26 — .27	Galbanum lb. .138 — .145
White	lb. .16 — .17	Gambier lb. .11 — .12
White Pine Reseed	lb. .07 — .08	Gamboge lb. .150 — .190
White Poplar	lb. .07 — .08	Guaiac lb. .55 — .60
Wild Cherry	lb. .15 — .21	Hemlock lb. .53 — .50
Witch Hazel	lb. .08 — .09	Kino lb. .50 — .50
BEANS		Mastic lb. .95 — .100
Calabar	lb. .40 — .45	Myrrh, Select lb. .85 — .90
Castor	lb. .054 — .064	Sorts lb. .70 — .78
Cocoa		Siftings lb. — —
Accura	lb. .18 — .19	Olibanum, siftings lb. .15 — .16
Bahia	lb. .20 — .22	Tears lb. .18 — .30
Caracas	lb. .25 — .28	Opium, See fine chem. list
Hayti	lb. — — .18	Sandarac lb. — — .80
Maracaiba	lb. .28 — .30	*Senegal, picked lb. — —
Trinidad	lb. .21½ — .23	Sorts lb. — —
St. Ignatius	lb. — — .50	Spruce lb. 1.00 — 1.30
St. John's Bread	lb. — —	Storax, Tech. cases lb. — — 1.50
Tonka, Angostura	lb. — — 1.75	Thus lb. — — .16
Para	lb. 1.15 — 1.25	Tragacanth, Aleppo first lb. — — 5.00
Surinam	lb. 1.00 — 1.10	Seconds lb. — — 5.00
Vanilla, Mexican, whole	lb. 4.50 — 5.50	Thirds lb. — — 2.50
Cuts	lb. 3.25 — 3.50	
Bourbon	lb. 3.00 — 3.25	
South American	lb. 3.25 — 3.75	
Tahiti, Yellow Label	lb. 2.75 — 3.00	
Green Label	lb. — — 2.75	
BERRIES		
Cubeb, ordinary	lb. 1.40 — 1.45	
XX	lb. 1.45 — 1.50	
Powdered	lb. — — 1.50	
Fish	lb. .26 — .28	
Horse, Nettle, dry	lb. .40 — .45	
Juniper	lb. — — .07	
Laurel	lb. .08 — .10	
Poke	lb. — — .22	
Prickly Ash	lb. .15 — .16	
Saw Palmetto	lb. .18 — .20	
Sloe	lb. .25 — .30	
FLOWERS		
Arnica	lb. .35 — .40	
Borage	lb. .60 — .70	
Calendula Petals	lb. — — 2.75	
Chamomile, German	lb. — — —	
Hungarian type	lb. .50 — .53	
Roman	lb. .35 — .40	
Spanish	lb. — — .45	
Clover Tops	lb. .11 — .12	
Dogwood	lb. .17 — .18	
Elder	lb. .30 — 1.00	
Insect, open	lb. — — .50	
Closed	lb. — — .75	
Powd. Flowers and stems	lb. .55 — .60	
Powd. Flowers	lb. .35 — 1.00	
*Kouasso	lb. — — .60	
Lavender, ordinary	lb. .18 — .20	
Select	lb. .26 — .28	
Linden, with leaves	lb. .35 — .37	
Without Leaves	lb. .40 — .55	
Malva, blue	lb. 1.00 — 1.10	
Black	lb. .55 — .60	
Mullein	lb. 1.68 — 1.70	
Orange	lb. 1.95 — 2.00	
Poppy, red	lb. .95 — 1.10	
Rosemary	lb. .60 — .65	
Saffron, American	lb. .33 — .34	
Valencia	lb. — — 16.00	
Tina (see Linden)		
*Nominal		
GUMS		
Aloes, Barbados	lb. — — 1.00	
Cape	lb. .13 — .14	
Curacao, cases	lb. .59 — .59½	
Socotrine, whole	lb. .75 — .80	
Powdered	lb. .90	
Ammoniac, tears	lb. — —	
Powdered	lb. — —	
Arabic, firsts	lb. .30 — .40	
"Secondes	lb. .30	
Sorts Amber	lb. .15½ — .16	
Powdered	lb. .27 — .30	
Asafoetida, whole, U.S.P.	lb. .350 — .360	
Powdered	lb. .475 — .500	
Benzoin, Siam	lb. .50 — .50	
Sumatra	lb. .33 — .36	
Camphor, ref., See fine chem. list		
Catechu	lb. .11 — .15	
Chile, Mexican	lb. .100 — .105	
Euphorbium	lb. .28 — .30	
Powdered	lb. .50	
Galbanum	lb. .138 — .145	
Gambier	lb. .11 — .12	
Gamboge	lb. .150 — .190	
Guaiac	lb. .55 — .60	
Hemlock	lb. .53 — .50	
Kino	lb. .50 — .50	
Mastic	lb. .95 — 1.00	
Myrrh, Select	lb. .85 — .90	
Sorts	lb. .70 — .78	
Siftings	lb. — —	
Olibanum, siftings	lb. .15 — .16	
Tears	lb. .18 — .30	
Opium, See fine chem. list		
Sandarac	lb. — — .80	
*Senegal, picked	lb. — —	
Sorts	lb. — —	
Spruce	lb. 1.00 — 1.30	
Storax, Tech. cases	lb. — — 1.50	
Thus	lb. — — .16	
Tragacanth, Aleppo first	lb. — — 5.00	
Seconds	lb. — — 5.00	
Thirds	lb. — — 2.50	
SHELLAC		
D. C.	lb. — —	
*Diamond "T"	lb. — —	
Fine Orange	lb. 1.75 — 1.80	
Second Orange	lb. — — 1.70	
T. N.	lb. 1.65 — 1.70	
Button	lb. 1.75 — 1.80	
Regular bleached	lb. 1.80 — 1.90	
Bone, dry	lb. 1.80 — 1.90	
Superfine	lb. — — 1.70	
LEAVES AND HERBS		
*Aconite	lb. .60 — .70	
Balmiony	lb. .15 — .17	
Bay, true	lb. — —	
Belladonna	lb. .30 — .31	
Boneset, leaves and tops	lb. .16 — .18	
Buchu, short	lb. 2.25 — 2.40	
Long	lb. 2.40 — 2.45	
Cannabis, true, imported	lb. — —	
American	lb. .29 — .35	
Catnip	lb. .15 — .16	
Chestnut	lb. .05 — .07	
Chiretta	lb. .25 — .26	
*Coca, Huanuco	lb. .60 — .70	
Truxillo	lb. — —	
Coltsfoot	lb. .18 — .19	
Conium	lb. .29 — .32	
Corn Silk	lb. .12 — .14	
Damiana	lb. — — .14	
Deer Tongue	lb. .12 — .14	
Digitalis, Domestic	lb. .27 — .28	
Imported	lb. .30 — .32	
Eucalyptus	lb. .10 — .11	
Euphorbia Pilularia	lb. .15 — .16	
Grindelia Robusta	lb. .14 — .15	
Henbane, German	lb. — —	
*Russian	lb. 1.20 — 1.25	
Domestic	lb. .35 — .40	
Henna	lb. .62 — .65	
Horehound	lb. .16 — .18	
Jaborandi	lb. — — .40	
Laurel	lb. .07 — .07½	
Life Everlasting	lb. .10 — .11	
Liverwort	lb. .21 — .25	
Lobelia	lb. .95 — 1.00	
Matico	lb. .20 — .23	
Marjoram, African	lb. .44½ — .45	
French	lb. .45 — .45½	
Nominal		
ROOTS		
Aconite, U.S.P.	lb. — — .90	
German	lb. — —	
*Alkanet	lb. 2.25 — 2.50	
Althea, cut	lb. — — .40	
Whole	lb. .35 — .40	
Angelica American	lb. .35 — .37	
Imported	lb. .39 — .40	
Arnica	lb. .85 — 1.00	
Arrowroot, American	lb. — — .10	
Bermuda	lb. — — .60	
St. Vincent	lb. — — .16	
Bamboo Brier	lb. .10 — .12	
Bearfoot	lb. .46 — .48	
Belladonna	lb. .50 — .55	
Berberis, Aquifolium	lb. .15 — .17	
Beth	lb. .18 — .20	
Blood	lb. .30 — .31	
Blueflag	lb. — — .45	
Bryonia	lb. .24 — .26	
Burdock, Imported	lb. .18 — .19	
American	lb. .16 — .17	
Calamus, bleached	lb. .60 — .65	
Unbleached, natural	lb. .16 — .17	
Cohosh, black	lb. .09 — .10	
Blue	lb. .12 — .13	
Colchicum	lb. 1.60 — 1.65	
Colombo, whole	lb. .24 — .29	
Comfrey	lb. .25 — .26	
Culver's	lb. .25 — .30	
Cransbill, see Geranium		
Dandelion, English	lb. .23 — .24	
American	lb. .22 — .23	
Doggrass, genuine	lb. .65 — .70	
Cat Bermuda	lb. .29 — .30	
Echinacea	lb. .65 — .70	
Elecampane	lb. .15 — .17	
Galangal	lb. .28 — .30	
Gelasmium	lb. .16 — .17	
Gentian	lb. .12 — .13	
Geranium	lb. .14 — .14	
Ginger, Jamaica, unbleached	lb. .23 — .28	
Bleached	lb. .30 — .32	
*Ginseng, Cultivated	lb. 1.00 — 9.00	
Wild, Eastern	lb. 5.00 — 10.00	
Northeastern	lb. 5.00 — 22.00	
Southern	lb. — —	
Golden Seal	lb. 5.90 — 6.00	
Powdered	lb. 6.50 — 6.75	
*Hellebore, Black, Imported	lb. 1.40 — 1.50	
White, Domestic	lb. .20 — .21	
Powdered	lb. .23 — .24	
Imported	lb. .21 — .23	
Ipecac, Cartagena	lb. — — 3.50	
Powdered	lb. — — 3.50	
Rio, whole	lb. — — 3.75	
Powdered	lb. — — 3.75	
Jalap, whole	lb. .50 — .55	
Nominal		

BOWRING & CO.

17 Battery Place NEW YORK

Cable Address, "Bowring"

Codes used: Western Union, ABC 5th Edition Bentley's

Exporters and Importers

LICORICE

GUM COPAL

CHIRETTA HERB

COCHINEAL

ESSENTIAL OILS

COCOANUT OIL IN BARRELS

SENNA LEAVES

NUX VOMICA

BEE'S WAX

CASTOR BEANS

*Our facilities enable us to render prompt
and efficient service at minimum charges*

Nux Vomica

H. R. Lathrop & Co., Inc.

110-116 Beekman Street, New York

Sole Agents

Kitagumi Japan Wax

Overseas Chemical Industry

In all parts of the World the production and use of Chemicals form an important factor in Commerce, and their usefulness is undoubtedly increasing every year. Science and Commerce are coupled greatly to the benefit of Commerce. In a word, Industrial and Engineering Chemistry is making very great progress, and everyone interested in the industry should read

THE CHEMICAL AGE

A Weekly Journal Devoted To Industrial and Engineering Chemistry

Its staff and contributors are British Chemists in the forefront of the modern movement in the Old Country

"The Chemical Age" is published weekly, price 6d.—The overseas subscription is 26s. per annum, prepaid

Advertisements relating to Chemicals, Chemical Apparatus and Plant of every description will be found in its pages

NO INDUSTRIAL CHEMIST OR CHEMICAL ENGINEER SHOULD BE WITHOUT IT

BENN BROTHERS, Ltd., "The Chemical Age," Offices, 8, Bouvierie St., London, England

ORDER FORM

Messrs. BENN BROTHERS, Ltd.,

"The Chemical Age," 8, Bouvierie Street, London, England.

Please forward "The Chemical Age" weekly until further notice. Enclosed is 26/- to pay the Subscription for One Year.

Name

Full Address

Date

Essential Oils, Aromatic Chemicals, Waxes and Seeds

Kava Kava	lb.	.28	— .30
Lady Slipper	lb.	1.00	— 1.15
Licorice, "Russian, ent."	lb.	.30	— .90
Spanish natural bales	lb.	.17	— .18
Selected	lb.	.35	— .40
Powdered	lb.	.24	— .25
Lavage, American	lb.	.73	— .75
Mannaca	lb.	.25	— .26
Mandrake	lb.	.35	— .36
Musk, Russian	lb.	1.90	— 2.00
Orris, Florentine bold	lb.	.29	— .31
Verona	lb.	.30	— .31
Pareira Brava	lb.	.30	— .32
Pellitory	lb.	.29	— .31
Pink, true	lb.	—	—
Pleurisy	lb.	—	—
Poke	lb.	.18	— .20
Rhatany	lb.	.12	— .14
Rhubarb	lb.	—	—
High Dried	lb.	—	—
Powdered	lb.	—	—
Sarsaparilla, Honduras	lb.	.70	— .75
American	lb.	.88	— .92
Mexican	lb.	.47	— .48
Senega, Northern	lb.	2.50	— 2.65
Southern	lb.	—	—
Serpentina	lb.	—	—
Skunk Cabbage	lb.	.20	— .22
Snake, Canada natural	lb.	.65	— .70
Stripped	lb.	—	—
Spikenard	lb.	.22	— .23
Skull, white	lb.	.12	— .13
Stillingia	lb.	.15	— .17
Stone	lb.	.12	— .14
Turmeric Madras	lb.	.10 ^{1/2}	— .11
Aleppy	lb.	.09	— .09 ^{1/2}
China	lb.	.07 ^{1/2}	— .08
Unicorn false (Heliosia)	lb.	.90	— 1.25
"True" (Aletria)	lb.	.95	— 1.10
Valerian, Belgian	lb.	.55	— .58
*English	lb.	—	—
*German	lb.	—	—
*Japanese	lb.	—	—
Yellow Dock	lb.	.13	— .15
*Yellow Parilla	lb.	—	—
SEEDS			
Anise, Levant	lb.	.20	— .20 ^{1/2}
Star	lb.	.23	— .25 ^{1/2}
Spanish	lb.	.21	— .21 ^{1/2}
Canary, "Spanish"	lb.	—	—
Morocco	lb.	.09 ^{1/2}	— .10
South American	lb.	.07 ^{1/2}	— .08
Caraway, African	lb.	.11	— .11 ^{1/2}
Dutch	lb.	.11	— .11 ^{1/2}
Domestic	lb.	—	—
Cardamom, bleached	lb.	1.68	— 1.70
Celery	lb.	.27	— .28
Colicicum	lb.	2.00	— 2.10
Conium	lb.	.39	— .40
Coriander, Bombay	lb.	.05 ^{1/2}	— .05 ^{1/2}
Morocco, Unbleached	lb.	.05 ^{1/2}	— .05 ^{1/2}
Bleached	lb.	.09	— .09 ^{1/2}
*Cumin, Levant	lb.	—	—
*Malta	lb.	—	—
Morocco	lb.	.10 ^{1/2}	— .10 ^{1/2}
Dill	lb.	.11	— .11 ^{1/2}
Fennel, French	lb.	.13	— .13 ^{1/2}
German	lb.	.14	— .16
Bombay	lb.	.12 ^{1/2}	— .13
Flax, whole	per bbl.	20.00	— 22.00
Ground	lb.	.11	— .12
Popenugreek	lb.	.04	— .04 ^{1/2}
Hemp, Manchurian	lb.	.09	— .09 ^{1/2}
Chilian	lb.	.09	— .09 ^{1/2}
Ioh's Tears, white	lb.	.07 ^{1/2}	n.r.
Larkspur	lb.	.23	— .35
Lobelia	lb.	—	—
Mustard, Barb. Brown	lb.	—	—
Dutch	lb.	.25	— .26
Bombay, Brown	lb.	.14 ^{1/2}	— .15
California brown	lb.	.16 ^{1/2}	— .17
Chinese, Yellow	lb.	.08 ^{1/2}	— .08 ^{1/2}
English, Yellow	lb.	.20	— .21
Parsley	lb.	.28	— .30
Poppy, "Dutch"	lb.	.60	— .61
Russian blue	lb.	—	—
Indian	lb.	.85	— .36
White Indian	lb.	.12 ^{1/2}	— .13
Quince	lb.	1.00	— 1.10
Kape, English	lb.	—	—
Japanese, small	lb.	.10 ^{1/2}	— .11
Domestic	lb.	.09 ^{1/2}	— .10
*Nominal	lb.	—	—
Sabadiilla	lb.	.16	— .17
stramonium	lb.	.25	— .26
strophanthus, Hippidus	lb.	1.55	— 1.60
Kombe	lb.	1.75	— 2.00
Sunflower, domestic	lb.	—	—
South American	lb.	.10	— .10 ^{1/2}
Worm, American	lb.	.38	— .40
Levant	lb.	1.20	— 1.25
SPICES			
Capsicum, African pods	lb.	.17	— .18
Numba	lb.	.15	— .16
Japan Caps	lb.	.19	— .20
assa Budu	lb.	.22	— .24
China, Selected, mats	lb.	.19	— .20
Saigon, assortment	lb.	.45	— .47
Chilies, Japan	lb.	.25	— .28
Mombasa	lb.	.18	— .19
Cinnamon, Ceylon	lb.	.35	— .58
Cloves, Zanzibar	lb.	.40	— .50
Amboynas	lb.	.54 ^{1/2}	— .55
Penang	lb.	.70	— .80
Ginger, African	lb.	.12 ^{1/2}	— .13
Jamaica, white good	lb.	.23	— .28
Japan	lb.	.14	— .14 ^{1/2}
Mace, Siaw	lb.	.48	— .49
Banda, No. 2	lb.	.41	— .42
Batavia, No. 2	lb.	.37 ^{1/2}	— .38
Nutmegs, 110c	lb.	.32	— .33
75s-80s	lb.	.33	— .34
Pepper, Black Sing.	lb.	.18 ^{1/2}	— .18 ^{1/2}
White	lb.	.30	— .30 ^{1/2}
Pimento, Select	lb.	.09 ^{1/2}	— .10
WAXES			
Bayberry	lb.	.43	— .44
Bees, light, crude	lb.	.43	— .44
Light, refined	lb.	.47	— .48
Dark	lb.	.46	— .46
Landellia	lb.	.31	— .32
Carnauba, Flor.	lb.	.85	— .90
No. 1, North Country	lb.	.82	— .85
No. 2, North Country	lb.	.63	— .65
No. 3, Fatty Gray	lb.	.43	— .50
Chalky	lb.	.45	— .48
Ceresin, Yellow	lb.	.13	— .14
White	lb.	.16	— .17
Japan	lb.	.19 ^{1/2}	— .20
Dontan, crude	lb.	.35	— .36
*Bleached	lb.	—	—
Zokerite, crude, brown	lb.	.35	— .36
*Green	lb.	—	—
*Refined, white	lb.	—	—
*Domestic	lb.	—	—
Refined, yellow	lb.	—	—
Paraffin, ref'd 128-130 deg. m.p. lb.	—	—	.08 ^{1/2}
*Foreign, 130-132 deg. m.p. lb.	—	—	.10 ^{1/2}
Stearic Acid, see Vegetables Oils, pg. 40	—	—	—
Essential Oils			
Almond, Bitter, U.S.P.	lb.	10.00	— 10.25
Bitter, f.f. P. A.	lb.	10.25	— 10.50
Artificial, U.S.P.	lb.	1.25	— 2.00
Sweet	lb.	.90	— 1.00
Peach Kernel	lb.	.50	— .52
Anise, U.S.P.	lb.	1.55	— 1.65
Bay	lb.	3.00	— 5.25
Bergamot	lb.	5.00	— 5.50
Artificial	lb.	—	— 4.25
*Bois de Rose	lb.	10.00	— 10.50
Cajuput, Native	lb.	.85	— .90
U.S.P.	lb.	1.00	— 1.25
Camphor, Sassafrassy	lb.	.12	— .14
Japanese, white	lb.	.28	— .30
Caraway, Rectified	lb.	4.50	— 4.75
Cassia, Technical	lb.	2.25	— 2.35
Lead, Free	lb.	2.40	— 2.50
Redistilled, U.S.P.	lb.	2.75	— 2.85
Cedar, Leaf	lb.	2.25	— 2.50
Cedar Wood, light	lb.	.35	— .37
Cinnamon, Ceylon, heavy	lb.	—	— 28.00
Citronella, Ceylon	lb.	.85	— .70
Java	lb.	.85	— 1.05
*Nominia	lb.	—	—
Cloves, can	lb.	3.50	— 3.75
Bottles	lb.	3.60	— 3.80
Copaiba, U.S.P.	lb.	.90	— .95
Coriander, U.S.P.	lb.	—	— 45.00
Croton	lb.	1.35	— 1.40
Cubeba, U.S.P.	lb.	9.00	— 9.75
Cumin	lb.	8.50	— 9.50
Erigeron	lb.	—	— 7.00
Eucalyptus, Australian, U.S.P.	lb.	1.00	— 1.05
Fennel, sweet, U.S.P.	lb.	2.75	— 3.00
Geranium, Rose Algerian	lb.	8.50	— 9.25
Bourbon (Reunion)	lb.	8.25	— 8.80
Turkish	lb.	4.75	— 5.00
Ginger	lb.	7.75	— 8.00
Gingergrass	lb.	—	— 3.25
Hemlock	lb.	.90	— 1.00
Juniper Berries, rect.	lb.	6.25	— 6.55
Twice rect.	lb.	7.75	— 8.00
Wood	lb.	—	— 1.50
Lavender Flowers, U.S.P.	lb.	10.50	— 11.50
Garden	lb.	.75	— 1.00
Spike	lb.	2.00	— 2.15
Lemon, U.S.P.	lb.	1.80	— 1.90
Lemongrass, Native	lb.	2.90	— 3.00
Limes, Expressed	lb.	3.50	— 3.75
Distilled	lb.	1.00	— 1.10
Linoleo	lb.	6.50	— 7.00
Mace, distilled	lb.	1.65	— 1.70
Mirbane, ref'd, see Aromatic Chemicals	lb.	25.00	— 30.00
Mustard, natural	lb.	8.50	— 9.50
Artificial	lb.	125.00	— 130.00
Neroli, bigarade	lb.	105.00	— 110.00
Petale	lb.	12.50	— 13.00
Artificial	lb.	18.50	— 25.00
Nutmeg, U.S.P.	lb.	1.60	— 1.65
Orange, bitter	lb.	4.50	— 5.00
Sweet, West Indian	lb.	5.00	— 5.25
Italian	lb.	6.40	— 6.50
Origanum, Imitation	lb.	.30	— .40
Oriox Concrete	oz.	5.00	— 5.25
Patchouli	lb.	25.00	— 30.00
Pennyroyal, domestic	lb.	1.90	— 2.05
Imported	lb.	1.75	— 2.00
Peppermint, Natural, tins	lb.	8.10	— 8.50
Redistilled, U.S.P.	lb.	8.75	— 9.00
Japanese	lb.	3.25	— 3.50
Petit Grain, So. America	lb.	9.00	— 9.50
French	lb.	—	—
Pinus Sylvester	lb.	2.25	— 2.50
Pumilio	lb.	—	— 5.25
Rose, French	oz.	15.50	— 16.00
Bulgarian	oz.	13.50	— 17.50
Artificial	oz.	2.75	— 3.25
Rosemary	lb.	1.20	— 1.25
Sandalwood, East India	lb.	10.75	— 11.25
Sassafras, natural	lb.	1.80	— 2.00
Artificial	lb.	.85	— .90
Savin	lb.	6.00	— 6.25
Spearmint	lb.	13.00	— 13.50
Spruce	lb.	.90	— .95
Tansy, Amer.	lb.	7.00	— 8.00
Thyme, red, French	U.S.P.	1.70	— 1.75
White, French	lb.	2.10	— 2.25
Wintergreen, sweet birch	lb.	6.00	— 6.25
Genuine Gaultheria	lb.	10.50	— 10.75
Synthetic, U.S.C.P., bulk	lb.	—	— .80
Wormseed, Baltimore	lb.	6.25	— 6.50
Wormwood, Dom.	lb.	12.00	— 12.50
Ylang Ylang, Bourbon	lb.	14.25	— 15.00
Manilla	lb.	30.00	— 32.00
Artificial	lb.	18.50	— 25.00
OLEORESINS			
Capsicum, 1-lb. bottles	lb.	4.00	— 4.25
Aspidium (Malefern)	lb.	8.50	— 9.50
Cubeb	lb.	7.75	— 8.00
Ginger	lb.	4.00	— 4.25
Malefern	lb.	8.50	— 9.00
Mullein (so-called)	lb.	5.00	— 5.25
*Orris, domestic	lb.	—	— 20.00
Imported	lb.	20.00	— 21.00
Parley Fruit (Petroselinum)	lb.	7.50	— 8.00
Pepper, black	lb.	—	— 7.00
AROMATIC CHEMICALS			
Acetophenone	lb.	4.50	— 6.25
Amyl Salicylate	lb.	1.85	— 2.00
Anethol	lb.	2.75	— 3.00
Anisic Aldehyde, C.P.	lb.	7.00	— 7.25
Benzyl Acetate	lb.	2.25	— 2.50
Benzyl Alcohol	lb.	2.50	— 2.75

Essential Oils

OLFORBINS

CAPSICUM	OLIVE OILS
Capsicum, 1-lb. bottles.....	lb. 4.00 — 4.25
Aspidium (Malefern)	lb. 8.50 — 9.00
Cubeb	lb. 7.75 — 8.00
Ginger	lb. 4.00 — 4.25
Malefern	lb. 8.50 — 9.00
Mullein (so-called)	lb. 5.00 — 5.25
*Orris, domestic	lb. — 30.00
Imported	lb. 20.00 — 21.00
Parsley Fruit (Petroselinum) lb.	7.50 — 8.00
Pepper, black	lb. — 7.00

AROMATIC CHEMICALS	
Acetophenone	lb. 4.50 — 6.25
Amyl Salicylate	lb. 1.85 — 2.00
Anethol	lb. 2.75 — 3.00
Anisic Aldehyde, C.P.	lb. 7.00 — 7.25
Benzyl Acetate	lb. 2.25 — 2.50
Benzyl Alcohol	lb. 2.50 — 2.75

OILS ESSENTIAL OILS

AND

Aromatic Chemicals

Manufacturers
Importers
Exporters

Correspondence Solicited

FRITZSCHE BROTHERS Inc.

NEW YORK

COMPAGNIE MORANA

Raw Materials
FOR
Perfumers
AND
Soapmakers

118 East 27th Street
New York19 S. La Salle Street
Chicago

Cable Address: Moransco, Newyork

ROCKHILL & VIETOR

Established 1884

22 CLIFF STREET NEW YORK

Essential Oils

Miscellaneous Chemicals

SANDALWOOD, E. I., U.S.P.

ROSE (Otto Rose), Bagaroff Brand

ROSE (Otto Rose), French, B. F.

ORANGE OIL, Sweet Italian & West Indian

LEMON MUSTARD, Artificial

Sole Agents in United States and Canada
for Bertrand Freres, Grasse Fr., and N. V.
Chemische Fabriek, Naarden, Holland

All Codes. Cable Address, Rockhill Newyork

VAN DYK & CO.

Inc. 1904

Manufacturers of

Perfumery Raw Material

Also the following Industrial Chemicals

Benzaldehyde
Benzyl Acetate
Benzyl Benzoate
Benzyl Alcohol
Cinnamic Aldehyde

*We solicit
your inquiries*

4-6 PLATT STREET NEW YORK

Heavy Chemicals—Metals

Benzyl Benzoate	lb.	4.25	—	4.50
Imported	lb.	—	—	—
Borneol	lb.	—	—	3.50
Bromostyrol	lb.	11.50	—	12.00
Cinnamic Acid	lb.	5.00	—	6.00
Cinnamic Alcohol	lb.	40.00	—	45.00
Cinnamic Aldehyde	lb.	7.25	—	7.50
Citra	lb.	4.65	—	5.00
Citronellol	lb.	16.00	—	18.00
Imported	lb.	—	—	30.00
Coumarin	lb.	8.00	—	8.50
Ethyl Cinnamate	lb.	6.00	—	8.00
Eucalyptol	lb.	1.50	—	1.75
Eugenol	lb.	6.50	—	6.63
Geraniol, from Citronella	lb.	4.00	—	5.25
Geranyl Acetate	lb.	6.00	—	6.50
Geranyl	lb.	—	—	—
Heliotropin	lb.	4.35	—	4.75
Indol, C. P.	oz.	—	—	—
Imported	oz.	—	—	30.00
Iso-Eugenol	lb.	9.20	—	10.00
Linalol	lb.	7.00	—	12.00
Linalol Acetate	lb.	13.50	—	15.00
Linalol Benzoate	lb.	—	—	18.00
Menthol	lb.	13.75	—	14.00
Methyl Anthranilate	lb.	12.50	—	14.00
Methyl Cinnamate	lb.	7.00	—	7.25
Methyl Paracresol	lb.	—	—	36.00
Methyl Salicylate	lb.	—	—	.80
Mirbane, rect. drums extra	lb.	.16	—	.17
Musk Ambrette	lb.	85.00	—	90.00
Musk Ketone	lb.	—	—	45.00
Musk Xylene	lb.	12.00	—	14.00
Phenylacetaldehyde	lb.	50.00	—	55.00
Phenylethyl Alcohol	lb.	38.00	—	40.00
Phenylacetic Acid	lb.	12.00	—	20.00
Rhodinol	lb.	20.00	—	22.00
Imported	lb.	—	—	30.00
Safrol	lb.	.80	—	.85
Terpineol, C. P.	lb.	—	—	1.50
Imported	lb.	—	—	1.70
Thymol	lb.	12.00	—	12.25
Vanillin	oz.	.95	—	1.05
Violet, artificial	lb.	12.00	—	18.00
<hr/>				
Heavy Chemicals				
<hr/>				
Acetic acid, 28 p.e., bbls., Incl.				
100 lbs.	—	—	3.75	
56 p.e., bbls.	100 lbs.	—	—	6.50
70 p.e., bbls.	100 lbs.	—	—	7.50
30 p.e., bbls.	100 lbs.	—	—	8.00
Redistilled	100 lbs.	—	—	8.50
Pure	100 lbs.	—	—	9.50
Glacial, bbls.	—	12.00	—	12.50
Alum, ammonia, lump	lb.	.04	—	.044
Ground	lb.	.044	—	.044
Powdered	lb.	.044	—	.044
Chrome	lb.	.15	—	.16
Potash lump	lb.	.0734	—	.08
Powdered	lb.	.06	—	.064
Chrome	lb.	.17	—	.18
Ground	lb.	.09	—	.094
Soda, Ground	100 lbs.	—	—	6.38
Aluminum chloride, carboys	lb.	—	—	.05
Anhydrous	lb.	—	—	.15
Sulph.	lb.	2.75	—	3.00
Low grade	lb.	1.70	—	1.85
Aluminum hydrate light	lb.	.16	—	.18
Heavy	lb.	.063	—	.10
Arsenic, white	lb.	.10	—	.12
Red	lb.	.20	—	.22
Arsenious Acid	lb.	.11	—	.1134
Ammonia, Anhydrous	lb.	.33	—	.35
Ammonia Carbonate	lb.	.1334	—	.1334
*Ammonia Water, 26 deg., carbo.	—	—	—	.1034
20 deg., carboys	lb.	—	—	.0934
18 deg., carboys	lb.	—	—	.0834
16 deg., carboys	lb.	—	—	.0734
*Nominal				
Ammonium chloride, U.S.P. lb.	—	—	20%	
Sal Ammoniac, gray	lb.	—	—	12%
Granulated, white	lb.	.15	—	.16
Lump	lb.	—	—	25%
*Sulphate, foreign	100 lbs.	—	—	26
Dom., double bags	100 lbs.	7.00	—	7.10
Antimony, Sulphuret	lb.	—	—	—
Crimson F.	lb.	—	—	.46
Golden No. 1	lb.	—	—	.35
No. 2	lb.	—	—	.30
Vermillion	lb.	—	—	.45
Slane Fixe, dry	lb.	.0334	—	.046
Barium, chloride	ton	95.00	—	105.00
Imported	ton	95.00	—	105.00
Binoxide	lb.	.23	—	.25
Nitrate	lb.	.11	—	.13
Sabrites, floated, white	ton	25.00	—	35.00
Off color	ton	14.00	—	18.00
Bleaching Pd., f.o.b. wks	100 lbs.	2.50	—	2.75
Export F.A.S.	100 lbs.	—	—	.35
Calcium Acetate	100 lbs.	2.00	—	2.10
Carbide	lb.	.05	—	.07
Carbonate	lb.	.034	—	.046
Light	lb.	.034	—	.046
Heavy	lb.	.03	—	.04
Chloride, solid, f.o.b. N.Y.	ton	20.00	—	25.00
Granulated, f.o.b. N.Y.	ton	—	—	—
Chlorine, liquefied	lb.	.094	—	.10%
Carbon bisulphide	lb.	—	—	.06
Carbon tetrachloride	lb.	—	—	.11
Copper Carbonate	lb.	—	—	.28
Subacetate (Verdigris)	lb.	.45	—	.48
Powdered	lb.	.40	—	.42
Sulphate, 98-99 p.e., 100 lbs.	8.25	—	8.37%	
99 p.e. carlots, N.Y.	8.25	—	8.30	
Copperas, f.o.b. works	100 lbs.	1.20	—	1.30
Fluorspar, Powdered	ton	42.00	—	45.00
Acid Grade	ton	50.00	—	60.00
Fuse Oil, crude	gal.	2.50	—	2.85
Refined	gal.	3.75	—	3.80
Hydrofluoric Ac. 03 p.e. bbls.	lb.	.06	—	.08
48 p.c. in carboys	lb.	.11	—	.12
52 p.c. in carboys	lb.	—	—	.12
Lactic Acid, 22 p.c.	lb.	.05	—	.07
Lead, Acetate, white crys.	lb.	.14	—	.145
Broken Cakes	lb.	.134	—	.14
Granulated	lb.	.134	—	.14
Arsenate, powdered	lb.	.28	—	.30
Paste	lb.	.134	—	.15
Nitrate	lb.	—	—	.15
Oxide, Litharge, Amer. pd.	lb.	.09	—	.13
Foreign	lb.	—	—	—
Red, American	lb.	.104	—	.13
Sulphate, basic	lb.	—	—	.084
White, Basic Carb., Amer.	lb.	—	—	.094
dry	lb.	—	—	.13
in Oil, 100 lbs. or over	lb.	—	—	.13
English	lb.	—	—	—
Lithopone	lb.	.07	—	.074
Lime, hydrate	lb.	—	—	—
Acetate	100 lbs.	2.00	—	2.05
Sulphur solution	gal.	.17	—	.22
Manganese Chlor.	lb.	.15	—	.16
Sulp.	lb.	.15	—	.17
Magnesite	ton	65.00	—	68.00
f.o.b. N. Y.	lb.	.034	—	.04
Muriatic acid,				
18 deg. carboys	100 lbs.	—	—	.150
20 deg. carboys	100 lbs.	1.65	—	.173
22 deg. carboys	100 lbs.	—	—	.200
Nickel oxide	lb.	.40	—	.50
Salts, single	lb.	.14	—	.16
double	lb.	.14	—	.15
Nitric acid, 36 deg. carboys	lb.	.05	—	.053
*38 deg. carboys	lb.	.094	—	.094
40 deg. carboys	lb.	.094	—	.097
42 deg. carboys	lb.	.07%	—	.074
Phosphoric Acid, 85-88 p.e.	lb.	.33	—	.38
50 p.e. tech.	lb.	.21%	—	.25%
Phosphorus red	lb.	.60	—	.70
Yellow	lb.	.35	—	.40
Sesquisulphide	lb.	—	—	.42%
Plaster of Paris	bbi.	1.50	—	1.60
True Dental	bbi.	1.75	—	2.00
Potash Caustic, 88-92	lb.	.28	—	.32
Sticks	lb.	1.00	—	1.10
Kinetics	cwt.	42.00	—	43.00
Shot	cwt.	—	—	43.00
Electrolytic	cwt.	—	—	45.00
Potassium Bichromate	lb.	.30	—	.32
Carbonate, calc. U.S.P.	lb.	.65	—	.70
80-85 p.c.	lb.	—	—	.24
85-90 p.c.	lb.	—	—	.28
90-95 p.c.	lb.	—	—	.34
96-98 p.c.	lb.	—	—	—
Chlorate, cryst.	lb.	.15	—	.17
Powdered, American	lb.	.15	—	.17
Japanese	lb.	.16	—	.19
Muriate, basis 80 p.c.	unit	—	—	3.00
Permanganate, Com'l	lb.	.55	—	.60
Prussiate, red	lb.	.95	—	1.00
Yellow	lb.	.38	—	.38
Sulphate	—	—	—	—
Pyrogallous Acid, Tech.	gal.	.12	—	.124
Saltpetre, Granulated	lb.	—	—	.14
Salt Cake	ton	17.00	—	18.00
Soda Ash, 58 p.c. light	100 lbs.	1.90	—	2.15
Dense 58 p.c. bags	100 lbs.	2.40	—	2.65
Caustic, 76 p.c.	—	—	—	—
F.o.b. Wks. basis 60	100 lbs.	3.00	—	3.30
F. A. S.	100 lbs.	4.25	—	4.35
Ground, 76 p.c.	100 lbs.	4.50	—	4.75
Sodium Acetate	lb.	.064	—	.07
Bichromate	lb.	.18%	—	.19
Bisulphite	ton	4.25	—	5.00
Carbonate, Sal. Soda in bbls.	1.25	—	1.35	
Bicarbonate	lb.	.23	—	.245
Chlorate	lb.	.30	—	.32
Cyanide 96-98	lb.	.27	—	.28
73-76 p.c.	—	—	—	3.60
Hypoosulphite, bbls. gran.	100 lbs.	—	—	3.85
Kegs	—	—	—	3.35
*Nitrate, tech.	100 lbs.	3.25	—	3.40
Phosphate	100 lbs.	.07	—	.074
Refined	lb.	.14	—	.15
*Nitrite	lb.	.25	—	.264
Prussiate, Yellow	lb.	.285	—	.285
Silicate, 60 deg.	lb.	.02	—	.024
40 deg.	lb.	.05	—	.054
Sulphide, 60 p.c.	lb.	.03	—	.034
30 p.c. crystals	lb.	.03	—	.034
Sulphite	lb.	.03	—	.034
Sulphate, Gl. b. salt	100 lbs.	1.40	—	.150
Sulphur Dioxide Com'l	lb.	.08	—	.11
Sulphur crude	ton	25.00	—	30.00
Flour Com'l., bbls.	100 lbs.	1.60	—	2.00
Roll, 100 p.c.	100 lbs.	3.20	—	3.50
Flowers, 100 p.c.	100 lbs.	3.55	—	3.95
Sulphuric Acid, Tank carlots	ton	—	—	16.00
66 deg. f.o.b. wks.	ton	21.00	—	23.00
66 deg. f.o.b. wks.	ton	22.00	—	23.00
Oleum, f.o.b. wks.	ton	22.00	—	.60
Tannic Acid, Tech.	lb.	.2134	—	.224
Tin, bichloride	lb.	.43	—	.45
Crystals	lb.	—	—	—
Whiting	100 lbs.	1.50	—	.175
Zinc, carbonate	lb.	.18	—	.21
Chloride, Fused	lb.	.06	—	.10
Granulated	lb.	.11	—	.13
Oxide, French	lb.	.12	—	.13
<hr/>				
Metals				
<hr/>				
Tin				
Straits	cwt.	—	—	.6323
Banca	cwt.	—	—	.6275
American, pure	cwt.	—	—	.6250
99% pure	cwt.	—	—	.6187
Copper				
Prime Lake	cwt.	19.50	—	20.00
Electrolytic	cwt.	19.00	—	19.25
Casting	cwt.	19.00	—	19.25
Lead				
Amer. S. & R. Co.	cwt.	—	—	8.00
Open Mkt. Price	cwt.	8.75	—	9.00
Zinc (Spelter)				
Shipment	cwt.	9.725	—	9.75
Prompt	cwt.	9.50	—	9.60
Antimony				
Chinese and Japanese	cwt.	—	—	9.87%
Aluminum				
98-99% Virgin	cwt.	31.00	—	32.50
98-99% Remelted	cwt.	31.00	—	32.00
Remeled No. 12	cwt.	29.00	—	30.00
Powdered	cwt.	—	—	42.00
Magnesium, 99%	lb.	1.75	—	2.00
Nickel				
Ingot	cwt.	42.00	—	43.00
Shot	cwt.	—	—	43.00
Electrolytic	cwt.	—	—	45.00

WHITING

FOR
PROMPT AND FORWARD
DELIVERY

PACKING { COTTON- DUCK BAGS
BARRELS
PAPER BAGS



Write or Phone for Quotation Today

INDUSTRIAL CHEMICAL CO.

Manufacturers

FIFTH AVENUE BUILDING
NEW YORK CITY
Gramercy 3242

WILLIAMSON & CO.

28-30 Burling Slip, New York

BROKERS

Intermediates and Dye Bases

SPECIALTIES

Amidonaphthol Sulphonic Acids

Phthalic Anhydride

Nitrated Phenols

W

W

Carbon Tetrachloride
Phosphorus Oxychloride
Sodium Phosphate, U.S.P.
Carbon Bisulphide

THE WARNER CHEMICAL COMPANY

Manufacturers

52 Vanderbilt Avenue, New York
Telephone Murray Hill 262

PLANTS

Carteret, N. J.
South Charleston, W. Va.

W

W



CHEMICALS

Colors — Naval Stores — Minerals

A few specialties for Wholesale Druggists

Carbonate of Magnesia
Technical or U.S.P.

Epsom Salts, U.S.P.

Castor Oil, Medicinal

Turpentine

Naphthalene

Precipitated Chalk

KATZENBACH & BULLOCK CO.

76 John Street, New York, N. Y.

Boston	Trenton	Montreal	Akron
Chicago	San Francisco	Paris	Buenos Aires

Cable Address: KABOCK NEWYORK All codes

Coal-tar Crudes, Intermediates and Colors—Naval Stores

Bismuth, (See Fine Chemical Prices)	
Cadmium	.1b. — 1.40
Cobalt	.1b. 2.30 — 3.00
Silver	.oz. — 1.31%
Platinum, pure	.oz. — 160.00
Iridium	.oz. — 300.00
Quicksilver, (See Fine Chemical Prices)	
Palladium	.oz. — 120.00
Tungsten, ore per short ton unit	
Wolframite, Chinese	.50 — 7.00
Bolivian	8.00 — 8.50
Scheelite	— 15.00

Naval Stores

(Carloads ex-deck)	
Spirits Turpentine in bbls.gal.	— 1.90
W. Turpentine, steam distilled, bbls.	— 1.55
U. Turpentine, Destructive distilled, bbls.	— —
Pitch, prime	.20 lb. bbl. 4.50 — 10.50
Rosina, B	— 17.75
D	— 17.85
E	— 18.00
F	— 18.25
G	— 18.50
H	— 18.65
I	— 18.75
K	— 19.75
M	— 20.00
N	— 21.50
WG	— 22.50
WW	— 28.50
Tar, kiln-burnt	bbls. — 14.50

Dyestuffs

COAL-TAR CRUDES	
*Benzol C. P.	gal. .27 — .31
(90 p.c.)	gal. .25 — .29
Cresylic acid, crude, 95-97 p.c.gal.	.75 — .80
50 p.c.	gal. — .60
25 p.c.	gal. — .49
Cresol, U.S.P.	lb. 15.50 — .17
Cresote oil, 25 p.c.	lb. .40 — .45
Dip. oil, 25 p.c.	lb. .40 — .45
Naphthalene, balls	lb. .071/2 — .081/2
Flake	lb. .07 — .08
Phenol	lb. .12 — .17
*Export	lb. .19 — .20
Pitch, various grades	ton 14.00 — 18.00
Solvent naphtha, waterwhite	.22 — .25
Crude heavy	gal. .16 — .18
*Toluol, pure	gal. .28 — .32
*Commercial, 90 p.c.	gal. .28 — .32
Xylool, pure water white	gal. .40 — .45
Commercial	gal. .30 — .35

INTERMEDIATES

Acid B	lb. — 2.25
Acid Broenner's	lb. 1.75 — 1.80
Acid Cleve	lb. 2.00 — 2.15
*Acid H	lb. 1.65 — 1.75
Acid Metanilic	lb. — 1.70
Acid Monosulphonic	lb. — .15
Acid Naphthionic, Crude	lb. .65 — .75
Refined	lb. 1.00 — 1.10
Acid Phthalic	lb. .58 — .60
Acid Pierle	lb. .25 — .50
Acid Sulphanic, crude	lb. .25 — .32
Refined	lb. .30 — .35
*Aminozobenzene	lb. 1.15 — 1.20
p-Aminophenol	lb. — 3.15
Hydrochloride	lb. — 3.00
*Aniline Oil	lb. .34 — .36
*Aniline Salt	lb. .45 — .48
Aniline for red	lb. .60 — .65
Anthracene (40 p.c.)	lb. — .40
Anthracene (80 p.c.)	lb. .65 — .70
Anthraquinone	lb. 5.50 — 6.00
Benzaldehyde, Tech.	lb. .65 — .75
U.S.P. & F.F.C. see Aromatic Chemicals	

*Nominal.

p-Dichlorbenzol	lb. .10 — .15
Dinitrobenzol	lb. .29 — .33
*Dimethylaniline	lb. .90 — 1.00
Dinitrochlorbenzol	lb. .23 — .28
Dinitronaphthalene	lb. .45 — .50
Dinitrotoluol	lb. .38 — .40
Diphenylamine	lb. .65 — .80
Dioxynaphthalene	lb. — —
"G" Salt	lb. .65 — .75
Hydrazobenzene	lb. 1.50 — 2.00
Methylantranilic	lb. — —
Monochlorbenzol	lb. .081/2 — .10
*Monoethylaniline	lb. 2.00 — 2.40
Naphthalenediamine	lb. — —
a-Naphthal, crude	lb. 1.00 — 1.05
*p-Naphthal, distilled	lb. — —
Sublimed	lb. .65 — .75
*a-Naphthylamine	lb. .40 — .45
b-Naphthylamine, tech.	lb. 1.15 — 1.25
Neville & Winther's Acid	lb. — —
m-Nitraniline	lb. 1.00 — 1.05
p-Nitraniline	lb. 1.30 — 1.35
Nitrobenzol	lb. .16 — .17
Nitrochlorbenzol	lb. .40 — .45
Nitronaphthalene	lb. .30 — .35
p-Nitrophenol	lb. .80 — .85
m-Nitro-p-toluidine	lb. — —
N-Nitrophenol	lb. .75 — .85
p-Nitrotoluol	lb. 1.15 — 1.40
Nitrotoluol	lb. — —
o-Nitrotoluol	lb. .17 — .23
p-Phenylenediamine	lb. 2.25 — 2.50
m-Phenylenediamine	lb. — —
Phthalic Anhydride	lb. .60 — .90
Phosgene	lb. — —
Pseudo-Cumoi	lb. — —
"R" Salt	lb. .75 — .75
Resorcin, Technical	lb. 3.75 — 5.00
Sodium Naphthalate	lb. — —
Schaeffer's Salt	lb. — —
Tetranitromethylaniline	lb. — —
Toldi	lb. — —
Mix Tolidine	lb. .44 — .50
Toluidine	lb. .25 — .30
p-Toluidine	lb. 1.75 — 2.00
m-Toluylenediamine	lb. 1.25 — 1.35
Xyldine	lb. — —

COAL-TAR COLORS

ACID COLORS:

Black	lb. 1.15 — 1.70
Blue	lb. 3.00 — 5.00
Brown	lb. 1.25 — 2.00
Fuchsin	lb. 2.50 — 3.50
Orange 11	lb. .45 — .50
Orange 111	lb. 1.00 — 1.25
Red	lb. 1.10 — 1.20
Scarlet	lb. — —
Violet 10B	lb. — —
Amidine Yellow R.	lb. — —
Alpine Yellow	lb. 2.00 — 7.50
Alkali Blue, Dom.	lb. — —
Alkali Blue, Imp.	lb. — —
Azo Carmine	lb. — —
Azo Yellow	lb. — —
Azo Yellow, green shade	lb. 3.50 — 4.50
Brilliant Delphine B.S.	lb. — —
Erythrosine	lb. 12.00 — 14.00
Fast Light Yellow, 2-G.	lb. — —
Fast Red, 6B extra, con't.	lb. — —
Granine	lb. 8.75 — 9.25
Indigo 20 p.c. paste	lb. — —
Indigotine, conc.	lb. 3.00 — 3.50
Indigotine, paste	lb. 1.50 — 1.60
Methyl Yellow	lb. 1.50 — 1.60
Medium Green	lb. 5.00 — 6.00
Naphthol Green	lb. — —
Naphthylamine Red	lb. 6.75 — 7.50
Orange, R. G., contract	lb. 2.00 — 2.25
Orange Y conc.	lb. .50 — .60
Patent Blue, Swiss Type	lb. 12.00 — 16.00
Ponceau	lb. — —
Scarlet 2R	lb. 1.00 — 1.10
Tartrazine, Dom.	lb. — —
Tartrazine, Imp.	lb. 1.25 — 1.40
Uranine	lb. 10.00 — 11.00
Wool Green S. Swiss	lb. 6.00 — 7.00

DIRECT COLORS:

Black	lb. .95 — 1.10
Sky Blue	lb. 3.25 — 3.75
Blue	lb. — —
Brown	lb. 1.55 — 1.75
Bordeaux	lb. 1.75 — 2.50
Fast Red	lb. 3.50 — 6.00
Fast Yellow	lb. 1.50 — 2.50
Yellow	lb. 2.00 — 4.00
Violet con't	lb. 2.20 — 2.50

Benzopurpurine 10 B.	lb. 3.50 — 4.00
Benzopurpurine 4 B.	lb. 1.80 — 1.90
Chrysophenine, Dom.	lb. — —
Chrysophenine, Imp.	lb. — —
Congo Red 4B Type	lb. 1.60 — 2.20
Diamine Sky Blue F. F.	lb. 5.00 — 5.25
Oxamine Violet	lb. 7.00 — 8.00
Primuline, Dom.	lb. — —

OIL COLORS:

Black	lb. .70 — 1.00
Blue	lb. 1.65 — 2.00
Orange	lb. 1.40 — 1.50
Red III	lb. 1.65 — 2.00
Red IV	lb. 1.80 — 2.50
Scarlet	lb. 1.75 — 2.00
Yellow	lb. 1.70 — 2.00
Nigrisine, Oil Sol.	lb. — —

SULPHUR COLORS:

Black	lb. .30 — .40
Blue Dom.	lb. .80 — .90
Brown	lb. .35 — .45
Green	lb. 1.00 — 2.00
Yellow	lb. .90 — 1.00

CHROME COLORS:

Alizarin Blue, bright	lb. 7.75 — 9.25
Alizarin, medium	lb. 6.25 — 7.50
Alizarin Brown, conc.	lb. — —
Alizarin Orange	lb. — —
Alizarin Red, W. S. Paste	lb. 5.00 — 10.00
Alizarin Yellow G.	lb. — —
Alizarin Yellow R.	lb. — —
Chrome Black, Dom.	lb. 1.25 — 1.35
Chrome Black, Imp.	lb. 2.20 — 2.50
Chrome Blue	lb. 2.50 — 2.75
Chrome Green, Dom.	lb. 1.50 — 1.70
Chrome Red	lb. — —

ASIC COLORS:

Auramine O. Dom.	lb. — —
Auramine OO. Imp.	lb. — —
Bismarck Brown Y.	lb. .90 — 1.00
Bismarck Brown R.	lb. 1.20 — 1.30
Brilliant Green Crystals	lb. 6.00 — 7.00
Chrysoidine R.	lb. — —
Chrysoidine V.	lb. — —
Crystal Violet	lb. 5.00 — 5.25
Emerald Green, Crystals	lb. — —
Indigo 20 p.c. paste	lb. — —
Fuchsine Crystals, Dom.	lb. 4.00 — 5.00
Fuchsine Crystals, Imp.	lb. 12.00 — 12.50
Magenta Acid, Dom.	lb. 4.25 — 5.00
Magenta Crystals, Imp.	lb. 10.00 — 12.00
Malachite Green, Crystals	lb. — —
Malachite Green, Powd.	lb. — —
Methylene Blue, tech.	lb. 2.25 — 3.50
Methyl Violet 6 B.	lb. 2.60 — 2.75
Nigrisine, spts. sol.	lb. — —
Nigrisine, water sol. blue	lb. — —

Phosphine G. Domestic	lb. 7.00 — 10.00
Rhodamine B, ex. cont'd.	lb. — —
Vainona, solid, 6% p.c. tan.	lb. 3.00 — 6.00
Victoria Blue B.	lb. 5.00 — 5.50
Victoria Blue, base, Dom.	lb. — —
Victoria Green	lb. 6.00 — 7.00
Victoria Red	lb. 7.00 — 8.00
Victoria Yellow	lb. 7.00 — 8.00

NATURAL DYESTUFFS

Anatto, fine	lb. .32 — .33
Seed	lb. .031/2 — .05
Carmine No. 40	lb. 5.25 — 5.50
Cochineal	lb. .65 — .80
Jambier, see tanning	
Indigo, Bengal	lb. 2.75 — 3.00
Oudes	lb. 2.25 — 2.25
Guatemala	lb. 2.00 — 2.25
Kurpaha	lb. 2.00 — 2.25
Madras	lb. .90 — 1.10
Madder, Dutch	lb. .25 — .28
Nuttalls, blue Aleppo	lb. .35 — .40
Chinese	lb. .31 — .36
Persian Berries	lb. — —
Inceriton Bark, see tanning	
Turmeric, Madras	lb. .101/2 — .11
Aleppey	lb. .081/2 — .09

DYEWOODS

Tarwood	lb. .06 — .08
Tamwood, chips	lb. .18 — .20
Pine, sticks	lb. .00 — .35.00
Clips	lb. .05 — .06
Hypernic, chips	lb. .07 — .07
*Logwood Sticks	lb. .00 — .60.00
Chips	lb. .031/2 — .051/2
Quercitron, see tanning	
Red Saunders	lb. .20 — .22

Direct Colors

Manufactured in our Newark Plant

**Yellows—Orange—Blues
Greens—Brown and Black**

Send for product samples and quotations

Manufactured by
JOHN CAMPBELL & CO.

Established 1876 — Incorporated 1907

75 Hudson Street, New York, N. Y.

Branches

Boston Philadelphia Providence
Charlotte, N. C., and Toronto, Can.

WORKS: Newark, N. J.

DICKS, DAVID CO., Inc.

299 Broadway
New York City

*Offer without engagement
for 1920 delivery*

Anthraquinone Malachite Green Large Crystals

*Prices and Samples
Upon Request*



Offers

DIANISIDINE
DINITROTOLUOL
LAURENT'S ACID
OIL OF MYRBANE
ORTHO TOLUIDINE
PARA AMIDOPHENOL
TOLIDINE BASE

Correspondence invited

E. I. du Pont de Nemours & Co.
Incorporated

Chemical Products Division

Du Pont Building,	WILMINGTON, DEL.
BRANCH OFFICES	
New York, N. Y. 21 East 43rd St.	Boston, Mass. Harvey Bldg.
Chicago, Illinois Mc Cormick Bldg.	San Francisco, Cal. Chronicle Building
	Columbus, Ohio Gugle Building

Fast Vat Dyes

made by
**SOCIETY OF CHEMICAL
INDUSTRY**

BASLE, SWITZERLAND

“CIBA”

Blue, Violet, Yellow, Red, Scarlet and Bordeaux

“CIBANON”

Green, Yellow and Orange

Obtainable now in rapidly increasing supplies.
Samples and quotations from

A. KLIPSTEIN & CO.

654 Greenwich Street, New York

Tanning Materials, Starches, Fats, Oils and Greases

DYE EXTRACTS

Archil, Double	lb.	.17	—	.20
Triple	lb.	—	—	.19
Concentrated	lb.	.20	—	.25
Catch, Mangrove, seen tanning:				
Rangoon, boxes	lb.	.16	—	.18
Liquid	lb.	.12	—	.14
Tablet	lb.	.14	—	.15
Cudbear, French	lb.	—	—	
English	lb.	.22	—	.25
Concentrated	lb.	—	—	
Flavine	lb.	1.00	—	1.50
Fustic, Solid	lb.	.22	—	.27
Crystals 100 p.c.	lb.	.30	—	.40
Extract 42 deg.	lb.	.14	—	.16%
Liquid, 51 deg.	lb.	.15	—	.19
Gall	lb.	.28	—	.30
Hemateine Extract 51 deg.	lb.	.16	—	.18
Crystals, 100 p.c.	lb.	.35	—	.40
Hypernic, liquid, 51 deg.	lb.	—	—	.24
Indigo, natural	lb.	2.00	—	2.50
Extract	lb.	.26	—	.30
Indigoine, 100 p.c. pure	lb.	3.00	—	3.50
Logwood, solid	lb.	—	—	.25
Crystals, 100 p.c.	lb.	.28	—	.30
51 deg., Twaddles	lb.	.16	—	.18
Osage Orange, Extract 42 deg.b.	lb.	.09	—	.16
Crystals, 100 p.c.	lb.	—	—	.20
Paste	lb.	—	—	.10
Persian Berries	lb.	—	—	
Quercitron, 51 deg.	lb.	.07%	—	.08%
Powdered, 100 p.c.	lb.	.14	—	.18

MISCELLANEOUS DYESTUFFS

Albumen, Egg	lb.	1.45	—	1.55
Blood, imported	lb.	.70	—	.75
Domestic	lb.	.55	—	.60
Prussian blue	lb.	.70	—	.80
Soluble	lb.	.70	—	.80
Turkey Red Oil	lb.	.15	—	.20
Zinc Dust, prime, heavy	lb.	.12	—	.14
100-lb. tins	lb.	—	—	.12
520-lb. casks	lb.	—	—	.11
Carload lots	lb.	—	—	.10

DEXTRINES AND STARCHES

British Gum	per 100 lbs.	8.00	—	8.50
Dextrine, Corn, white or yellow	per 100 lbs.	6.75	—	7.00
Potato, white or canary	lb.	.17	—	.18
Starch, Powd., bags & bbls...		—	—	5.85
Pearl, Globe, bags & bbls...		—	—	5.20
Potato, Domestic	lb.	.074	—	.08
Imported, duty paid	lb.	.06	—	.08%

RAW TANNING MATERIALS

Algarobilla	ton	185.00	—	200.00
Divi Divi	ton	74.00	—	76.00
Hemlock Bark	ton	15.00	—	16.00
Mangrove, African, 38 p.c.	ton	110.00	—	125.00
Bark, S. A.	ton	60.00	—	65.00
Myrobalans	ton	50.00	—	60.00
Oak Bark	ton	15.00	—	16.00
Ground	ton	—	—	17.50
Quercitron Bark rough	ton	13.00	—	15.00
Ground	ton	27.00	—	28.00
Sumac, Sicily, 27 p.c.	ton	ton	—	120.00
Virginia, 25 p.c.	ton	ton	—	120.00
Velveta Cupa	ton	—	—	
Beard	ton	—	—	
Wattle Bark	ton	—	—	90.00

*Nominal

TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan, bbls.	lb.	.03	—	.03%
Clarified, 25 p.c. ton, bbls.	lb.	—	—	.03%
Crystals, ordinary	lb.	—	—	
Clarified	lb.	—	—	
Gambier, 25 p. c. tan	lb.	.17	—	.18
Common	lb.	.09	—	.11
Cubes, Singapore	lb.	.18	—	.20
Cubes, Java	lb.	.14	—	.16
Hemlock, 25 p.c. tan	lb.	.05	—	.05%
Larch, 25 p.c. tan	lb.	.04%	—	.04%
Crystals, 30 p.c. tan	lb.	.06%	—	.06%
Mangrove, 55 p.c. tan	lb.	.09	—	.10
Liquid, 25 p.c. tan	lb.	.08	—	.10
Muskego, 23-30 p.c. tan, 50 p.c. total solids	lb.	.01%	—	.01%
Myrobalana, liq., 23-25 p.c. tan	lb.	Nominal	—	
"Solid, 50 p.c. tan	lb.	—	—	
Oak Bark, liquid, 23-25 p.c. tan	lb.	—	—	.05%
Quebracho, liquid, 35 p.c. tan	lb.	—	—	.07%
"35 p.c. tan, untreated	lb.	—	—	.06%
"35 p.c. tan, bleaching	lb.	—	—	.06%
"Solid, 65 p.c. tan, ordinary	lb.	—	—	.12
"Clarified	lb.	—	—	
Spruce, liquid, 20 p.c. tan, 50 p.c. total solids	lb.	.01%	—	.01%
Sumac, liquid, 25 p.c. tan	lb.	.06%	—	.08
Vaioni, solid, 65 p.c. tan	lb.	Nominal	—	

VEGETABLE OILS

Castor, No. 1 bbls.	lb.	—	—	.20
Casca	lb.	—	—	.21
No. 3	lb.	18%	—	.19
China Wood Oil, bbls.	lb.	24	—	.24%
Coconut, Dom., Ceylon, bbls.	lb.	19%	—	.20
Tanks	lb.	.19	—	.21
Manila, tanks, coast	lb.	.19%	—	.20
Cubes, Java	lb.	18%	—	.19
Corn, refined, bbls.	lb.	—	—	.23%
Crude, Tanks	lb.	—	—	.19
Cottonseed, Crude, f. o. b. mills, in tanks	lb.	.19%	—	.20
Summer, yel, prim, bbl.	lb.	.22	—	.22%
"White	lb.	—	—	
"Winter, yellow	lb.	.23%	—	.26
Linseed, raw car lots	gal.	—	—	.177
5 barrel lots	gal.	—	—	.180
Billed, 5-bbl. lots	gal.	—	—	.183
Double Billed, 5-bbl. lots	gal.	—	—	.194
*Olive, denatured	gal.	2.50	—	2.55
Edible	gal.	3.10	—	3.20
Foots	lb.	.19%	—	.19%
Palm, Lagos, casks	lb.	.17%	—	.17%
*Benin	lb.	—	—	.17
Niger	lb.	.16%	—	.16%
*Palm Kernel, domestic	lb.	—	—	
"Imported	lb.	—	—	
Peanut Oil, refined	lb.	.27	—	.28
"Crude, f.o.b. mills	lb.	.23	—	.24
Oriental, coast, tanks	lb.	.23	—	.23%
Poppy Seed	gal.	2.75	—	3.00
Rapeseed, ref'd, bbl.	gal.	1.60	—	1.65
"Blown	gal.	1.65	—	1.70
*Sesame, domestic, edible	gal.	—	—	.25
"Imported	gal.	—	—	
Soya Bean, Tanks, Pac.Coastib.	lb.	.17%	—	.17%
New York, bbls.	lb.	.18%	—	.18%

GREASES, LARD, TALLows

(New York Markets)

Grease, white	lb.	.17%	—	.17%
Yellow	lb.	.12%	—	.13%
House	lb.	.12%	—	.13
Grease, Brown	lb.	.08	—	.10
Lard, City	lb.	—	—	.23
Compound	lb.	—	—	.25
Stearine, lard	lb.	—	—	.32
Oleo	lb.	—	—	.21
Tallow, edible	lb.	—	—	.17%
City, prime	lb.	—	—	.14
(Chicago Markets)				
Tallow, edible	lb.	—	—	.17
City Fancy	lb.	—	—	.16%
Prime Packers	lb.	—	—	.16
Grease, Choice White	lb.	.16	—	.16%
"A" White	lb.	.15%	—	.16
"B" White	lb.	.14%	—	.15
Yellow	lb.	.18	—	.18%
Brown	lb.	.11%	—	.12%
Bone	lb.	.09%	—	.10%
House	lb.	.12%	—	.13
Stearine, prime oleo.	lb.	—	—	.20%
Lard, city steam	lb.	—	—	.23

OIL CAKE AND MEAL

Cottonseed Cake, f.o.b. Texas	—	—	—	—
f.o.b. New Orleans	—	—	—	—
Cottonseed Meal, f.o.b. Atlanta	—	—	—	—
Columbia	—	—	—	—
New Orleans	—	—	—	—
Corn Cake	short ton	\$5.00	—	\$7.00
Meal	short ton	\$9.00	—	\$4.26
Linseed cake, dom.	short ton	—	—	\$0.00
Linseed Meal	short ton	—	—	\$0.00

*Nominal

The California Ink Company of San Francisco, which also conducts a manufacturing plant there and controls a suburban chemical plant, has taken a ten-year lease on a building at 426 Battery street, now occupied by a wholesale liquor house. Two stories will be added to the structure and other extensive improvements made.

Shipments of cassia oil from Hongkong in 1919 were valued at about \$250,000, of which Japan took a portion but most of which came to the United States. The value of the shipments of aniseed oil was about the same, Great Britain being the best buyer, with the United States being a fair second. Other essential oils went mostly to South China and Indo-China.

DRUGS
CHEMICALS
COLORS
DYE STUFFS



ORES
MINERALS
OILS
WAXES

Sodium Benzoate Copperas Stearic Acid

LAIDLAW, KELLEY & CO. INC.
14 Platt St. NEW YORK.
Telephone John 1566

THE *Jelldeed* BRAND

Phthalic Anhydride

PURE Needle CRYSTALS

Moisture	None
Chlorides	None
Chlorine	None
Sulphur	None
Benzoinic Acid	None
Phthalic Acid	0.03%
Ash	
PHTHALIC ANHYDRIDE	99.97%
MELTING POINT	131.90°C.

Containers, 5 to 200 lbs.
Domestic and Export

New Process, refined to the
HIGHEST DEGREE OF PURITY
No variation in quality

**THE WALKER
CHEMICAL COMPANY**

Pittsburgh, Pa., U. S. A.

Menthol

AND

Camphor

Oriental Department

**Chas. Morningstar & Co.
Inc.**

349 Broadway
New York

North Star Products

LANOLINE--U.S.P.

(Adeps Lanus)

HYDROUS—ANHYDROUS
HIGHEST Q ALITY COLOR PERFECT
ODORLESS LOWEST PRICES

NEUTRAL WOOL FAT

A COLOR AND GRADE
FOR EVER REQUIREMENT

WOOL GREASE

ALL GRADES



Send for samples and prices

**NORTH STAR CHEMICAL WORKS
In.**

LAWRENCE, MASS.

"America's Original Refiner of Lanoline"

Export Agents Stanley, Jordan & Company, Inc. 93 Water St. New York

Imports of Chemicals, Dyestuffs, Drugs, etc.

Imports from Jan. 9 to Jan. 16

- ACIDS-Boracic**, Crude, 47 casks., Pacific Coast Borac Co., Leghorn; Citric, 200 casks., C. Sone, Palermo; Crystals, 100 kegs, Brown Bros. & Co., London; Oxalic, 76 casks., A. Klipstein & Co., Bristol; 19 casks., J. C. Wiarda & Co., Bristol; Tartaric, 20 casks., American Express Co., Leghorn; 7 casks., 5 kegs, McKesson & Robbins, London; 100 casks., C. Sone, Palermo; 100 casks., L. Washbourne & Co., Trieste; 100 casks., J. Lewis, Palermo
- ALBUMEN**-25 ccs., Standard Bank of South Africa, London
- ALCOHOL**-50 drums, 75 drums, 100 bbls., New York Industrial Alcohol Co., San Juan
- ALMONDS**-Bitter, 740 bgs., Brown Bros. & Co., Trieste; 25 bgs., 50 bgs., C. Friedenburgh, Marseilles; 100 bgs., British Bank of South Africa, Palermo; 200 bgs., London & Liverpool Bank of Commerce, Palermo; 100 bgs., H. P. Winter & Co., Naples; 140 bgs., Brown Bros. & Co., Marseilles; 250 bgs., Steinhardt & Nordlinger, Tarragona; 500 bgs., W. R. Grace & Co., Tarragona; Sweet, 280 ccs., Santiago Fernandez Guerra 200 bxs., British Bank of South America Ltd., Tarragona
- AMMONIUM MURIATE**-56 casks., 70 casks., C. De P. Field & Co., Bristol; 116 casks., Brown Bros. & Co., Bristol; Nitrate, 1,700 bbls., United States Army, London
- ARGOLIS**-42 casks., 121 casks., Tartar Chemical Works, Leghorn; Crude, 307 bgs., 618 bgs., Chas. Pfzer & Co., Lisbon
- BALSAM TOLU**-71 ccs., Gustave Amsinck & Co., Para; 20 ccs., New York Overseas Co., Inc., Para; 20 ccs., Mercantile Bank of America, Porto Colombia; 50 ccs., George Amsinck & Co., Inc., Porto Colombia
- BARK-Cinchona**, 186 lbs., Powers-Weightman-Rosengarten Co., Batavia; 800 lbs., Powers-Weightman-Rosengarten Co., Samrang; Medicinal, Miscellaneous, 2,318 lbs., J. E. Haley, Inc., Durban; 2,240 lbs., National Bank of South America, Ltd., Durban; 1,132 lbs., Smith & Schipper, Durban; 1,200 lbs., Goldman, Sachs & Co., Durban; 1,100 lbs., Proctor & Gamble & Co., Durban; Wattie, 925 lbs., East Asiatic Co., Durban; 2,359 lbs., Collier & Son, Durban; 2,181 lbs., Smith & Schipper, Durban; 4,775 lbs., A. A. Marks, Durban; 1,128 lbs., 7,772 lbs., Brown Bros. & Co., Durban
- BEANS-Castor**, 32 bgs., Gustave Amsinck & Co., Cristobal; Cocoa, 5,158 bgs., 1,000 bgs., 835 bgs., National City Bank, Bahia; 500 bgs., Faria Costa & Co., Bahia; 2,000 bgs., 4,000 bgs., Bank of New York, Bahia; 6,159 bgs., W. R. Grace & Co., National Bank, Bahia; 175 bgs., Handels Compagnie, Samrang; 4,300 bgs., Guaranty Trust Co., Bahia; 25 bgs., Manufacturers Union, Inc., St. Lucia; 112 bgs., W. Schall & Co., San Domingo; 105 bgs., W. Schall & Co., Macoris; 759 bgs., F. Ricart & Co., Macoris; 18 bgs., Mass Chocolate Co., Lisbon; 200 bgs., E. F. Darrell & Co., Trinidad; 25 bgs., Yglesias & Co., Trinidad; 520 bgs., T. Scott & Co., Trinidad; 50 bgs., De Lima, Correa & Co., Trinidad; 200 bgs., 100 bgs., A. S. Lascelles & Co., Trinidad; 3,250 bgs., W. R. Grace & Co., Trinidad; 500 bgs., Wood & Sellick, Trinidad; 25 bgs., H. A. Attlett, Trinidad; 1,000 bgs., 24 bgs., 200 bgs., 200 bgs., Brown Bros. & Co., Trinidad; 128 bgs., F. E. Childs & Co., Trinidad; 27 bgs., Gillespie Bros. & Co., Trinidad; 200 bgs., Colonial Bank, Trinidad; 40 bgs., Frame, Laycraft & Co., Trinidad; 318 bgs., Royal Bank of Canada, Trinidad; 1,021 bgs., 75 bgs., 40 bgs., Midleton & Co., Trinidad; Powder, 40 ccs., Brown Bros. & Co., Rotterdam; Vanilla, 11 ccs., 41 ccs., Brown Bros. & Co., Marcellies; 105 ccs., A. Chris & Co., Marseilles; 105 ccs., Brown Bros. & Co., Marseilles; 5 bgs., S. B. Penick & Co., Marseilles
- BERRIES-Hawthorn**, 5 bgs., S. B. Penick & Co., London; Juniper, 100 bgs., A. S. Salzmann, Leghorn; 200 bgs., T. Sanico & Co., Inc., Leghorn; 50 bgs., 70 bgs., 150 bgs., 50 bgs., 300 bgs., 100 bgs., Brown Bros. & Co., Leghorn
- CASEINE**-12 bgs., Innis, Speiden & Co., Havre
- CERIUM OXALATE**-5 bbls., Merck & Co., Hamburg
- CHEMICALS**-Miscellaneous, 13 casks., Brown Bros. & Co., Hamburg
- CUTTLEFISH BONE**-51 lbs., Behr & Co., Trieste
- DIGITALYSATUM**-10 ccs., E. Bischoff & Co., Hamburg
- DIVI-DIVI**-2,232 bgs., Paris & Co., Porto Colombia
- DYESTUFFS**-Aniline Colors, 4 cylinders, A. Irwin, Havre; 1 ccs., Lazard, Godchaux & Co., Havre; 4 cylinders, New York Color & Chemical Co., Inc., Havre; 30 cylinders, Aniline Dyes, Inc., Havre; 25 cylinders, W. F. Sykes & Co., Havre; 5 cylinders, Chemical National Bank, Havre; 10 cylinders, F. Bredt & Co., Havre; 6 cylinders, Heller, Metz & Co., Havre; 2 cylinders, American Aniline Co., Havre; 4 cylinders, Chas. Bischoff & Co., Havre; 7 cylinders, E. M. Thayer & Co., Havre; 5 cylinders, F. E. Atteaux & Co., Havre; 15 cylinders, L. B. Fortner & Co., Havre; 25 cylinders, Andreykovics & Dunk, Havre; Dyewood, 1,195 pieces, C. H. Pearson, Cristobal; Miscellaneous, 128 casks., New York Color & Chemical Co., Rotterdam
- DRUGS**-Crude, 7 ccs., J. L. Hopkins & Co., Hamburg; Miscellaneous, 9 ccs., 6 ccs., Atlantic National Bank, Havre; 53 ccs., E. Fougera & Co., Havre; 1 ccs., Ungerer & Co., Havre; 2 ccs., Southern Pacific Co., Havre
- EXTRACTS-Licorice**, 50 ccs., Foreign Trade Banking Corporation, Seville; 75 ccs., Gason, Williams & Co., Seville; Miscellaneous, 2 casks., American Dyewood Co., Havre; Quebracho Extract Co., Sante Fe; 1,998 bgs., American Trading Co., Buenos Aires
- FLOWERS-Borage**, 15 lbs., 6 lbs., Brown Bros. & Co., Leghorn; Chamomile, 2 lbs., R. Gates, Leghorn; 17 lbs., Brown Bros. & Co., Leghorn; Insect, 14 lbs., Behr & Co., Trieste; Lavender, 2 lbs., Reichenbach & Miller, Marseilles; Lily of the Valley Pipe, 175 ccs., International Forwarding Co., Hamburg; Miscellaneous, 23 bgs., 16 bgs., 5 lbs., 12 lbs., Brown Bros. & Co., Trieste; Tilia, 11 bgs., 11 lbs., Brown Bros. & Co., Leghorn; Violet, 2 ccs., L. Shenegan, Leghorn; 2 ccs., Hopkins & Co., Leghorn; 2 ccs., R. Hillier's Son & Co., Leghorn
- FRUIT JUICE**-8 ccs., Van Ammeren Corporation, Rotterdam
- GELATIN**-21 ccs., P. C. Zuhke, Rotterdam
- GLYCERIN**-46 drums, French American Banking Corporation, Buenos Aires; 120 ccs., Brown Bros. & Co., Marseilles
- GUM-Arabic**, 145 casks., Thurston & Bradlitch, Marseilles; Olbanum, 2 ccs., American Export Co., London
- HERBS-Medicinal**, 3 bgs., F. B. Vandegrift & Co., Leghorn; 119 lbs., 3 bgs., 1 ble., 2 bgs., 2 bgs., 51 bgs., Brown Bros. & Co., Leghorn; 29 bgs., Happel & McAvoy, Hamburg; 11 bgs., Happel & McAvoy, Hamburg; 19 bgs., Brown Bros. & Co., Trieste; 188 bgs., 15 bgs., Oriental Navigation Co., Valencia; 20 ccs., 119 bgs., 44 bgs., 9 bgs., Brown Bros. & Co., Leghorn
- HOPS**-5 bgs., Hensel, Bruckmann & Lorbacher, Rotterdam
- ICELAND MOSS**-6 lbs., 16 lbs., Brown Bros. & Co., Leghorn
- INSECTICIDE**-10 drums, Maltus & Ware, London
- ISINGLASS**-1 ccs., Brown Bros. & Co., London
- LEAVES-Basilic**, 1 ble., A. Tolbourn & Co., Marseilles; Buchu, 5 bgs., Brown Bros. & Co., East London; Laurel, 110 bgs., Brown Bros. & Co., Leghorn; 22 bgs., Brown Bros. & Co., Trieste; Medicinal, Miscellaneous, 15 bgs., EH Lilly & Co., Marseilles; 182 bgs., German & Co., Marseilles; 100 bgs., A. Stallman & Co., Marseilles; Nettle, 1 ble., Brown Bros. & Co., Leghorn; Sage, 3 bgs., Brown Bros. & Co., Trieste; 105 bgs., Archibald & Lewis, Marseilles; 75 bgs., 200 bgs., Brown Bros. & Co., Marseilles; Stramonium, 13 bgs., Brown Bros. & Co., Trieste; 15 bgs., Brown Bros. & Co., Leghorn
- LIME CARBONATE**-30 bbls., Schleffelin & Co., Bristol
- LIME JUICE**-2 cks., Middleton & Co., Trinidad
- LYCOPODIUM**-10 ccs., 43 ccs., McKesson & Robbins, London
- MANNA**-10 bgs., National City Bank, Palermo
- MEDICINES**-Miscellaneous, 1 ccs., W. Steinmader, Havre; 5 ccs., N. Monticelli, Palermo; 8 ccs., J. Personeni, Genoa; 10 ccs., E. Fougera & Co., London
- NICKEL SULPHITE**-47 casks., 10 casks., Fuerst Bros. & Co., Bristol
- OIL-Coco-Nut**, 20 ccs., Darley, Butler & Co., Colombo; Cod, 75 cks., Oil Products Co., Halifax; 350 cks., Canadian Bank of Commerce, Halifax; 100 bbls., W. & S. Job, Halifax; 100 cks., Redden & Martin, St. John's; 500 cks., Brown Bros. & Co., St. John's; 169 cks., Wright & Co., Halifax; Codiver, 15 bbls., Townson & James, St. John's; 223 bbls., Brown Bros. & Co., St. John's; Linseed, 772 bbls., Spencer, Kellogg & Sons, Rotterdam; 174 bbls., Dod & Jones, Ltd., Bristol; 878 bbls., 117 bbls., 293 bbls., Cook & Swan, Inc., Bristol; 293 bbls., W. R. Grace & Co., Bristol; 176 bbls., Clement & Son, Bristol; Raw, 282 bbls., 235 bbls., Spencer, Kellogg & Sons, Rotterdam; 57 cks., W. Van Doorn, Rotterdam; Olive, 150 ccs., Charles & Co., Leghorn; 75 ccs., Rockhill & Victor, Marseilles; 30 bbls., 30 ccs., Brown Bros. & Co., Marseilles; 1,000 ccs., 425 ccs., J. P. Smith & Co., Marseilles; Sulphur, 50 bbls., W. Schall & Co., Leghorn
- OILS, ESSENTIAL**-Bay, 1 ccs., Baran Distributing Co., Trinidad; Caraway Seed, 15 ccs., Aver Blue Co., Rotterdam; Citronella, 8 drums, Java Holland American Trading Co., Lemon, 50 ccs., National City Bank, Palermo; 10 ccs., Rockhill & Victor, Palermo; Mint, 5 ccs., O. G. Hempstead & Sons, Havre; Rose, 1 pot, American Express Co., London
- PERFUMERY**-43 ccs., Chas. Baez, Havre; 11 ccs., A. Bourjouis & Co., Havre; 100 ccs., R. Gallet, Havre; 3 ccs., Dodge & Olcott Co., Havre; 71 ccs., A. H. Smith & Co., Havre; 6 ccs., Thomas & Pierson, Havre; 46 ccs., F. R. Arnold & Co., Havre; 1 ccs., Gray Drug Co., Havre; 9 ccs., F. H. Prindle, Havre; 3 ccs., E. Fougera & Co., Havre; 20 ccs., E. H. Burr, Havre; 2 ccs., V. Vivaudou, Rotterdam; 15 ccs., B. E. Levy, Havre; 1 ccs., O. G. Hempstead & Co., Havre; 12 ccs., G. Borgfeldt & Co., Marseilles; 6 ccs., A. Stillwell & Co., Marseilles; 2 cks., Davies, Turner & Co., Marseilles; 53 ccs., Morano & Co., Marseilles; 56 ccs., Cia Morana, Marseilles; 5 ccs., 14 ccs., 12 ccs., Brown Bros. & Co., Marseilles
- PHARMACEUTICAL PRODUCTS**-1 ccs., J. D. Kuper & Bros. Inc., London; 1 ccs., Equitable Trust Co., Havre; 12 ccs., A. Klipstein & Co., Havre
- POTASSIUM SALTS**-Bromide, 16 ccs., 3 bbls., L. Israel & Bros., Hamburg; Muriate, 5,000 bgs., Hollingshurst & Co., Hamburg
- QUININE SULPHATE**-580 ccs., Powers-Weightman-Rosengarten Co., Batavia; 249 ccs., McKesson & Robbins, Batavia; 13 ccs., Powers-Weightman-Rosengarten Co., London
- ROOT-Bryony**, 10 bgs., S. B. Penick & Co., London; Campania, 74 bgs., J. R. Bates, Vera Cruz; 157 bgs., A. E. Hegewisch, Vera Cruz; 15 bgs., 12 bgs., Brown Bros. & Co., Vera Cruz; Colchicum, 4 bgs., J. L. Hopkins & Co., London; Colombo, 25 bgs., S. B. Penick & Co., London; Dandelion, 50 bgs., Peek & Velsor, London; 157 bgs., J. L. Hopkins & Co., London; 13 bgs., F. Stearns & Co., London; 30 bgs., S. B. Penick & Co., London; Gentian, 1 ble., Reichenbach & Miller, Marseilles; 55 bgs., Brown Bros. & Co., Marseilles; Hellebore, 42 bgs., Brown Bros. & Co., Leghorn; Ipecac, 1 ble., 1 ble., Gustave Amsinck & Co., Inc., Cartagena; 20 bgs., P. Finlay & Co., Ltd., Santos; 4 bgs., De Lima, Correa & Cortissoz; Licorice, 276 bgs., Brown Bros. & Co., Co., Smyrna; 462 bgs., F. H. Petry & Co., Catania; 77 bgs., W. Brandt's Sons & Co., Catania; 60 bgs., Brown Bros. & Co., Port Said; 84 bgs., 178 bgs., Brown Bros. & Co., Catania; 31 bgs., Brown Bros. & Co., Marseilles; Medicinal, Miscellaneous, 130 bgs., McLaughlin, Gormley, King & Co., Marseilles; 205 bgs., P. E. Anderson & Co., Marseilles; 11 bgs., F. B. Vandegrift & Co., Palermo; 33 bgs., 32 bgs., Brown Bros. & Co., Trieste; 48 bgs., Brown Bros. & Co., Hamburg; Orris, 11 bgs., Peek & Velsor, Leghorn; 147 bgs., Dodge & Olcott Co., Palermo; 145 bgs., Farmers' Loan & Trust Co., Palermo; 145 bgs., A. Chris & Co., Palermo; 89 bgs., F. B. Vandegrift & Co., Palermo; 143 bgs., Brown Bros. & Co., Co., Palermo; 52 bgs., Brown Bros. & Co., Trieste; 162 bgs., T. Samco & Co., Inc., Leghorn; 66 bgs., Dodge & Olcott Co., Leghorn; 1 ccs., J. Schonegan, Leghorn; 73 bgs., 114 bgs., 62 bgs., 55 bgs., Brown Bros. & Co., Leghorn; Flingers, 5 ccs., National City Bank, Leghorn



ACIDS, ALUMS AND MISCELLANEOUS CHEMICALS

We offer a high grade line of acids, alums and miscellaneous chemicals. We invite correspondence in regard to any of the following products:

Acids: Acetic, Lactic, Sulphuric, Aqua Fortis, Muriatic, Nitric, Oil of Vitriol, Mixed, Oleum, Electrolyte.

Alums: Iron Free, Pearl, Porous, Paper-makers, Filter, Sizing, Ammonia, U.S.P., Pickle, Potash, U.S.P., Sulfate of Alumina, 16%-17%-22% Al_2O_3 .

Chemicals: Battery Solutions, Barium Chloride, Strontium Nitrate. Distilled Water, Carbonate of Strontia, Salt Cake, Nitrate of Soda, Barium Nitrate.

E. I. du Pont de Nemours & Company, Inc.

Sales Dept.: Acids and Heavy Chemicals Division
WILMINGTON, DELAWARE

Gum Arabic White Sorts SPOT



Established 1856

FRAZAR & CO.

30 Church St., New York

Cable Address
Fydamo, New York

Telephone
Cort. 2013

Sole Agents

CARAPANAYOTI & CO., London and Khartoum

SULPHATE OF SODA

Anhydrous and Neutral
For Standardizing Aniline Dyes

Manufactured by

THE GRASSELLI CHEMICAL CO.

New York Cleveland Chicago

THE GRASSELLI CHEMICAL CO., Ltd.

Toronto

Montreal

Naphthalene Balls Naphthalene Crystals

The Chatfield Manufacturing Co.
Cincinnati, Ohio, U.S.A.

DANA & COMPANY, Inc.
111 Broadway New York, N.Y.
EASTERN SELLING AGENTS

INNIS, SPEIDEN & CO., Inc.

Established 1819

Incorporated 1906

Industrial Chemicals
Import COMMISSION MERCHANTS Export
46 Cliff St., New York

Chicago Boston Philadelphia Cleveland

Cable address:—Innis, Newyork: Codes A.B.C., Lieber's,
Western Union, Private

Jordan Coal Tar Products, Inc.

13 Cliff Street, New York

Specialists in

Benzols	Toluols	Xyloids
Solvent Naphthas	Heavy Naphthas	
Creosote Oils (All Grades)	Dead Oils	
Anthracenes	Tars	Pitches
Naphthalene (Crude—Flake)		
Phenol-Cresylic Acid Phenol-Cresols		

Sales Agents
Manufacturers Importers Exporters

SURPLUS Dyestuffs For Sale

We have a quantity of surplus Dyestuffs which we offer for sale. Send for list.

Product samples will be furnished on request.

SIDNEY BLUMENTHAL & CO., Inc.

Purchasing Dept.
SHELTON CONN.



**HERCULES
CHEMICALS**

To Leather Splitters and Finishers

A s a manufacturer of Artificial, split and patent leather you know that the quality of your products depends to a large extent upon the selection of your raw materials.

Hercules Soluble Cotton, Soluble Cotton Solutions and Solvents are made especially to fit the needs of leather manufacturers. The purity and uniformity of these chemicals is assured by the careful technical control under which they are manufactured. They are absolutely stable and free from acidity. The solutions that they make are "long flowing" and dry with a tough, pliable film that does not scratch or crack.

We carry on hand large stocks of standard dopes for immediate delivery. If you require special formulas our technical staff is at your service.

You will find many of the chemicals that you use listed at the left of the coupon printed below. Sign this coupon indicating the products that interest you and mail it to the nearest office of the Hercules Powder Co. (Chemical Sales Division). We will send you complete information (giving prices, formulas, etc.) about the commodities indicated.

HERCULES POWDER CO.

CHEMICAL SALES DIVISION

Wilmington,
Delaware
McCormick Bldg.
Chicago

120 Broadway
N. Y. City
Chronicle Bldg.
San Francisco



Underline the Products that Interest You PYROXYLIN AND PYROXYLIN PRODUCTS

Nitro Cellulose
Soluble Cotton (Pyroxylin)
Leather Cloth Solutions
Split Leather Dopes
Patent Leather Dopes
Waterproof Belt Cements

Waterproof Cements
Lacquer Bases
Thinner
Heavy Base Solutions
Amylate Solutions

CHEMICALS

Ethyl Propionate (Propionic Ether)
Ethyl Butyrate (Butyric Ether)
Dinitrotoluol (D.N.T.)
Valerates
Zinc Valerate
Ammonium Valerate U.S.P.
Quinine Valerate N. F.
Iron Valerate U.S.P.
Nitrobenzene (Oil of Myrrhe)

Sodium Propionate
Sodium Butyrate
Amyl Propionate
Butyl Propionate
Amyl Butyrate
Butyl Butyrate
Amyl Valerate
Butyl Valerate

HERCULES POWDER CO.—Chemical Sales Division.
Gentlemen:—

Kindly send information about products underlined.

We wish to use them for.....

Name

Address

MILK SUGAR

NATIONAL BRAND

National Brand Sugar of Milk has been the standard of quality the world over since 1883

POWDERED GRANULAR
IMPALPABLE CRYSTALS

THE ROSEMARY CREAMERY CO.
NATIONAL MILK SUGAR CO. DIVISION

15 Park Row, New York

Want Ads

EMPLOYEES FURNISHED. Stores sold—also furnished; All States. Positions. Doctors, Dentists, Veterinarians furnished. F. V. KNIEST, Omaha, Neb., Estab. 1904.

PHTHALIC ANHYDRID—C.P. and Technical
PHTHALIC ACID—Technical

Spot Contract Any Quantity

THE WESTERN RESERVE CHEMICAL CO.
3434 E. 93rd Street CLEVELAND, OHIO

CHURCH & DWIGHT Co.

80 Maiden Lane
New York

Bicarbonate of Soda
Sal Soda
Monohydrate of Soda

Potassium Permanganate Saccharine

CARUS CHEMICAL COMPANY

Manufacturer
LA SALLE, ILL., U. S. A.

“Assured Quality”

ETHYL ALCOHOL

In All Formulas
NON-BEVERAGE AND DENATURED
Spot or Contract

Manufactured by THE ROSSVILLE COMPANY, Lawrenceburg, Ind.

(Established 1832)

Sole Selling Agents:

Marden, Orth & Hastings Corporation

(Established 1837)

136 Liberty Street, New York City

Boston
St. Louis

Chicago
Seattle

Philadelphia
San Francisco

Cincinnati
Cleveland

Florasynth Laboratories, Inc.

AROMATIC CHEMICALS

Raw Materials for the Perfumery and Flavoring Extract Trade
EXPORTERS—IMPORTERS—MANUFACTURERS



BETANAPHTHOL BENZOATE, A. M. A.

SPOT

CONTRACT

15 Beekman Street, New York, N. Y.

105 North Clark Street, Chicago, Ill.

Sulphate of Ammonia**Bicarbonate of Potash**

U.S.P.

Carbonate of Potash

All Grades

Potash Alum Lump U.S.P.**Arsenic****George F. Taylor Commission Co.**

Established 1873

2 Rector Street New York

Lemon Oil Orange Oil

Italian and West Indian

F. C. LUTHI & CO.277 BROADWAY
NEW YORK, N.Y.

P & B P & B P & B

PFALTZ & BAUER, Inc.
300 PEARL STREET
NEW YORK CITY
FRENCH VIRGIN
OLIVE OIL
Cans of 1-16 to 1 gallon

P & B P & B P & B

WE OFFER FOR PROMPT DELIVERY

GUAIACOL COMPOUNDS
EXTRACT MALEFERN
CHRYSAROBIN
ARECOLIN HYDROBROM.
SODA CACODYLATE
SCAMMONY RESIN, Etc., Etc.

MAY & BAKER, LTD.
Manufacturing Chemists and Exporters
BATTERSEA, LONDON, ENGLAND
Cable Address: BISMUTH, LONDON

HEINE & CO.

7 Platt St. NEW YORK U. S. A.

Perfumers' Raw Materials

Most highly concentrated oils and synthetics for
all classes of perfumery, toilet waters,
creams, powders, soaps, etc.



Requests
for Samples or
Information invited



National Colors Are National Assets

Our line now comprises upwards of 200 definite dyes, of high grade standard qualities, and produced in commercial quantities, for all classes of color-using requirements.

Our Research Laboratories are constantly developing new colors, adding to the above line, and leading to the independence of American industries, both directly and indirectly, from foreign sources of supply.

NATIONAL ANILINE & CHEMICAL CO., Inc.

21 Burling Slip

New York

BRANCH OFFICES

Akron

Boston

Charlotte

Chicago

Cincinnati

Hartford

Milwaukee

Philadelphia

Providence

Montreal

Toronto

ALPHA NAPHTHYLAMIN ORTHO TOLUIDIN TOLIDIN

QUALITY FIRST

SHIPMENT PROMPT

NEWPORT CHEMICAL WORKS, Inc.

120 BROADWAY

NEW YORK CITY

The Whole World

is eagerly watching the progress of the United States in the manufacture of Anilines.

Don't hinder this progress by using a cheap neutralizing agent.

Use our

Pure Anhydrous Sulphate of Soda

Free from Ammonia and Iron,
and Strictly Neutral

The Kalbfleisch Corporation

31 Union Square, West
New York



CHEMICALS

Monochloracetic Acid

TRADE DOW MARK Also 75 Other Products

THE DOW CHEMICAL COMPANY

MIDLAND
MICHIGAN

90 WEST STREET
NEW YORK CITY

ESSENTIAL OILS



MAGNUS, MABEE & REYNARD, Inc.

257 PEARL STREET

NEW YORK CITY

